

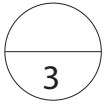
حمل الآن

مجاناً وحصرياً

# المراجعة رقم (1)

## اختبار شهر مارس





## 1 Choose the correct answer:

- a  $28\% + 31\% = \dots\dots\dots$  . ( 59 , 0.59 , 100% , 3% )
- b If Ali bought 9 kg of oranges for 36L.E., then the price of each kg =  $\dots\dots\dots$  L.E.  
( 36 , 9 , 4 , 3 )
- c The point ( 0 , 7 ) lies in/on  $\dots\dots\dots$  . ( Y-axis , X-axis , 3<sup>rd</sup> quadrant , 4<sup>th</sup> quadrant )



## 2 Answer each of the following:

- a Ali has 100 L.E. He spent  $\frac{3}{4}$  of what he has, what is the percentage of the money he spent?

Answer:

.....

.....

- b Salem bought a car for 420,000 L.E. He paid 40% of its price.

How much money did he pay?

Answer:

.....

.....

- c Find the distance between the point C ( 4 , -3 ) and point D ( 4 , 2 ) on the coordinate plane.

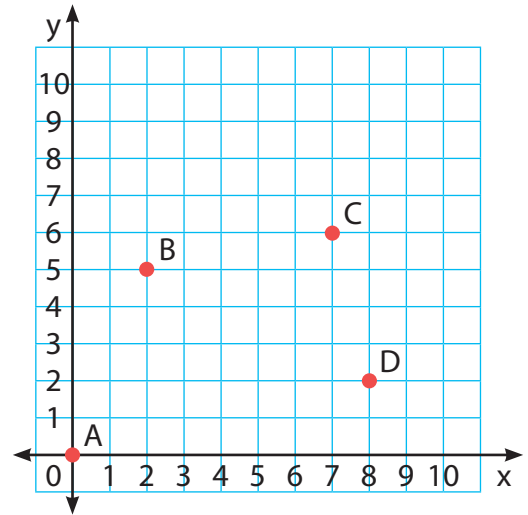
Answer:

.....

.....

- d Use the opposite figure to write the coordinate of each point of the following:

▶ A ( ..... )      ▶ B ( ..... )  
 ▶ C ( ..... )      ▶ D ( ..... )



- e Write the coordinates of the image of the following points by reflection across X-axis:

1 A (2, -3)      2 B (0, 7)      3 C (-1, 2)

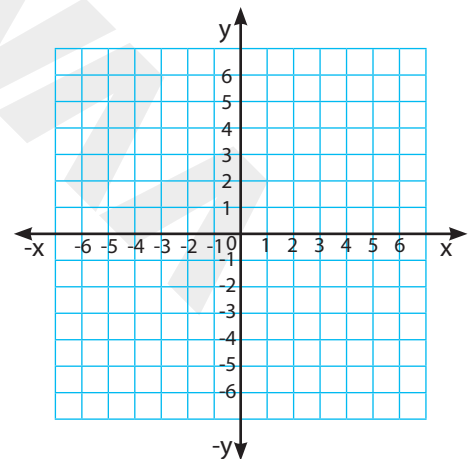
Answer:

1 .....  
 2 .....  
 3 .....

- f Plot the points A (-4, 2), B (2, 2), C (2, -2) and D (-4, -2) on the coordinate plane, state the name of the figure ABCD produced from joining these points.

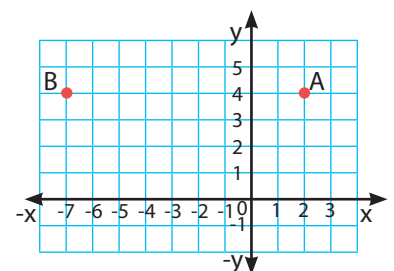
Answer:

▶ .....



- g From the opposite coordinate plane, complete:

▶ The coordinate of point A .....  
 ▶ The coordinate of point B .....  
 ▶ The length of  $\overline{AB}$  is ..... units.



3

## 1 Choose the correct answer:

- a Which point is a reflection of  $(1, 8)$  across the y-axis on a coordinate plane?

$[(1, -8), (-1, -8), (8, -1), (-1, 8)]$

- b  $1 - 25\% =$  ..... (25% , 75 , 0.75 , 85%)

- c 30% of 120 = ..... (45 , 35 , 36 , 46)

7

## 2 Answer each of the following:

- a Adham bought a TV set, its original price is 23,500 L.E. The sales tax on the TV set is 12%. What is the price of the TV set after adding the tax?

Answer:

.....  
 .....

- b A fruiterer sold 20% of the amount of fruits he has. If he sold 20 kgs of fruits. How many kgs of fruits does the fruiterer have before selling?

Answer:

.....  
 .....

- c Find the distance between the point  $C(-2, -3)$  and point  $D(-2, -9)$ .

Answer:

.....

- d Write the coordinates of the image of each point of the following by reflection across Y-axis:

1 A  $(7, -2)$

2 B  $(-1, 4)$

3 C  $(-10, -2)$

Answer:

1 .....

2 .....

3 .....

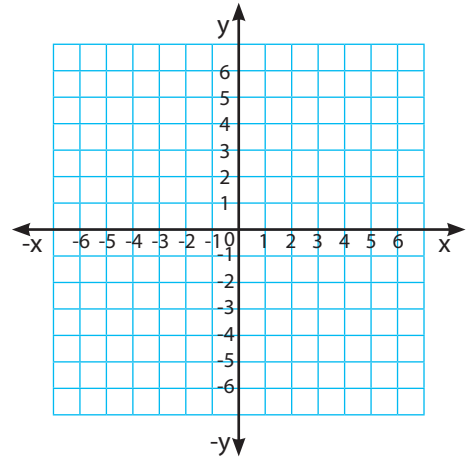


- e Plot and join the points in the given order, then complete the figure by joining the end points, and identify the figure.

A (-3, 3) , B (2, 3) , C (3, -2) , D (-4, -2)

Answer:

▶ .....



- f If the point (4, -3) is reflected across the X-axis, find the distance between the point and its reflection.

Answer:

▶ .....

▶ .....

- g Write the position of each of the following points in the coordinate plane:

▶ A (-2, 2)

▶ B (3, -2)

▶ C (1, 7)

▶ D (0, 5)

Answer:

▶ .....

▶ .....

▶ .....

▶ .....

3

## 1 Choose the correct answer:

- a If the percentage of success in a school is 81%, then the percentage of failure is ..... %  
(81 , 20 , 19 , 40)

- b From the opposite table, the value of the unknown = .....

Whole	Part	Percent
Unknown	38	40%

( 48 , 45 , 38 , 95 )

- c A point both of its coordinates are negative lies in ..... quadrant.

(1<sup>st</sup> , 2<sup>nd</sup> , 3<sup>rd</sup> , 4<sup>th</sup> )

7

## 2 Answer each of the following:

- a Amal has 120 L.E. She spent  $\frac{2}{3}$  of what she has.

What is the percentage of money she spent?

Answer:

.....

.....

- b Islam went to a restaurant. The subtotal of the bill was 410 L.E. A 8% service charge and 5% taxes charge are added to the bill. Calculate the total sum of the bill.

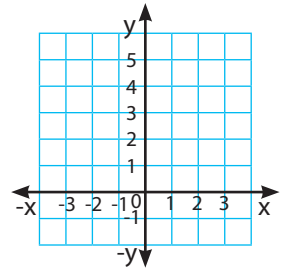
Answer:

.....

.....

.....

- c Plot the points A  $(-3, 2)$ , B  $(1, 4)$ , and C  $(1, 0)$  on the opposite coordinate plane, then determine the type of the resulted triangle according to its angles measures.



**Answer:**

- d Write the position of each of the following points in the coordinate plane:

▶ A  $(-5, 7)$

▶ B  $(6, -3)$

▶ C  $(5, 3)$

▶ D  $(4, 0)$

**Answer:**

▶ .....

▶ .....

▶ .....

▶ .....

- e Write the image of the following points by reflection across the X-axis:

▶ A  $(-1, 3)$

▶ B  $(0, 9)$

▶ C  $(3, 0)$

**Answer:**

▶ .....

▶ .....

▶ .....

- f Find the distance between each pair of points in the following:

1  $(-2, 4)$  and  $(-2, -1)$

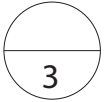
2  $(3, -1)$  and  $(7, -1)$

**Answer:**

1 .....

2 .....

- g Complete: If the point at the position  $(-2, 3)$  has moved 2 units to the right and 3 units upwards, then its new position is .....



## 1 Choose the correct answer:

a 20% of 120 km = ..... km.

(20 , 24 , 26 , 28 )

b From the opposite table, the value of the unknown = .....

Whole	Part	Percent
420	Unknown	40%

(168 , 200 , 40% , 420 )

c The point (0 , -2) lies in/on ..... . ( Y-axis , X-axis , 3<sup>rd</sup> quadrant , 4<sup>th</sup> quadrant)

## 2 Answer each of the following:

a A car price is 350,000 L.E. The owner gives a 15% discount on it. Calculate the selling price of the car after the discount.

Answer:

.....

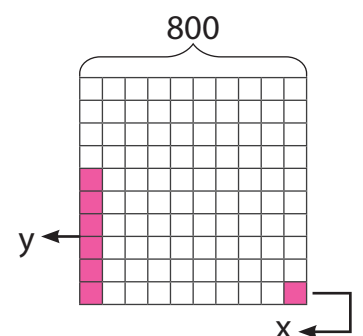
.....

b Salem has 120 pens in his bag. If 20% of them are red, then find the number of red pens in his bag.

Answer:

.....

c Complete:

From the following  $10 \times 10$  grid:  $x + y =$  .....

- d A piece of cloth of 30 meters long, was put in water, it shrank by 3%. What is its length after shrinking?

Answer:

.....

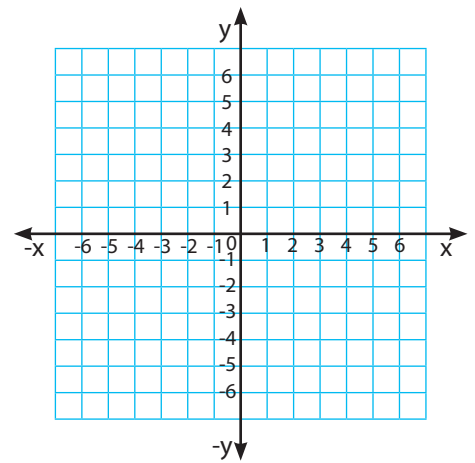
.....

- e Plot and join the points in the given order, then complete the figure by joining the end points, and identify the shape.

A (3, 3) , B (3, -3) , C (-5, -3) , D (-3, 3)

Answer:

▶ .....



- f Find the distance between the point C (5, -2) and point D (5, 6).

Answer:

.....

.....

- g Write the position of each of the following points in the coordinate plane:

1 A (0, 2)

2 B (1, -3)

Answer:

1 .....

2 .....

## 1 Choose the correct answer:

- a  $33\% + 42\% = \dots\dots\dots$  . (59 , 0.75 , 100% , 3%)
- b Which point is a reflection of (7 , -2) across the Y-axis on the coordinate ptane?  
[ (7 , 2) , (-7 , 2) , (7 , -2) , (-7 , -2) ]
- c From the opposite table, the value of the unknown =  $\dots\dots\dots$  .

Whole	Part	Percent
Unknown	60	30%

( 100 , 120 , 180 , 200 )

## 2 Answer each of the following:

- a Younis bought a TV set for 45,000 pounds, he paid 25% of its price.

How much money did he pay?

Answer:

.....

- b The price of a car is 600,000 L.E. and the sales tax on the car is 12%. What is the price of the car after adding the tax?

Answer:

.....

.....

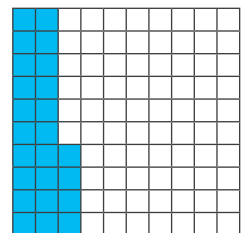
- c Using the given model:

Find 24% of the number 82

Answer:

.....

.....



**d Complete:**

Aliaa plotted a point on the coordinate plane 4 units to the right of the origin point and 2 units up, then the ordered pair representing the point is .....

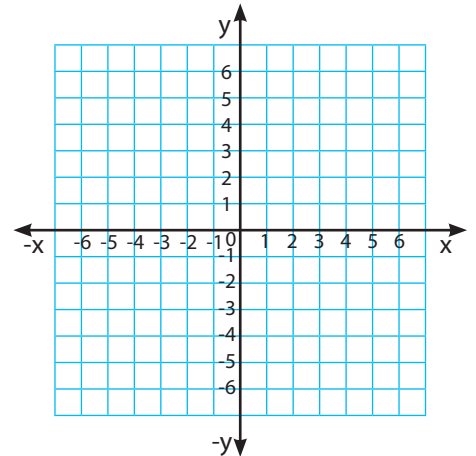
- e** Graph the points A (3 , 2), B (3 , -4) and C (-5 , -4), join them to draw the triangle ABC and find the images of each point by reflection across the X-axis.

**Answer:**

▶ .....

▶ .....

▶ .....



- f** Mention the position of each point of the following in the coordinate plane:

**1** A (8 , 0)

**2** B (-1 , 3)

**Answer:**

**1** .....

**2** .....

- g** Find the distance between each pair of the points of the following:

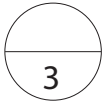
**1** (3 , 4) and (-3 , 4)

**2** (0 , 4) and (0 , 1)

**Answer:**

**1** .....

**2** .....



## 1 Choose the correct answer:

- a  $28\% + 31\% = \dots\dots\dots$  . ( 59 , 0.59 , 100% , 3% )
- b If Ali bought 9 kg of oranges for 36L.E., then the price of each kg =  $\dots\dots\dots$  L.E.  
( 36 , 9 , 4 , 3 )
- c The point ( 0 , 7 ) lies in/on  $\dots\dots\dots$  . ( Y-axis , X-axis , 3<sup>rd</sup> quadrant , 4<sup>th</sup> quadrant )



## 2 Answer each of the following:

- a Ali has 100 L.E. He spent  $\frac{3}{4}$  of what he has, what is the percentage of the money he spent?

**Answer:**

$$\text{Ali spent} = 100 \times \frac{3}{4} = 75 \text{ L.E.}$$

$$\text{The percentage of money he spent} = 75 \div 100 = 75\%$$

- b Salem bought a car for 420,000 L.E. He paid 40% of its price.

How much money did he pay?

**Answer:**

$$\text{Whole price} = 420,000 \quad \text{percent} = 40\% \quad \text{Part} = ??$$

$$\text{Part} = \text{Whole} \times \text{Percent}$$

$$\text{Then Salem paid} = 420,000 \times 40\% = 168,000 \text{ L.E.}$$

- c Find the distance between the point C ( 4 , -3 ) and point D ( 4 , 2 ) on the coordinate plane.

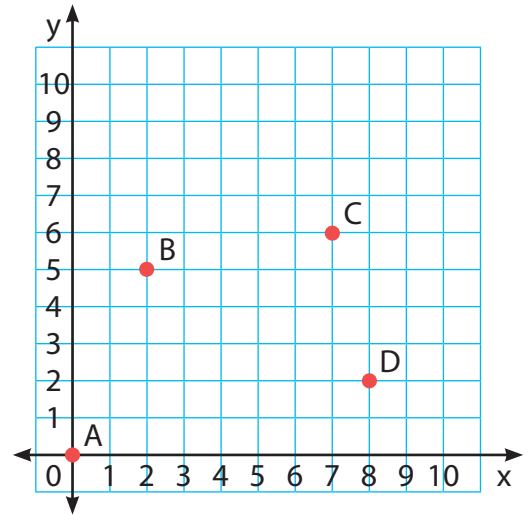
**Answer:**

$$\text{The distance between the points C and D} = |-3| + |2| = 5 \text{ units}$$



- d Use the opposite figure to write the coordinate of each point of the following:

- ▶ A (0, 0)                      ▶ B (2, 5)  
▶ C (7, 6)                    ▶ D (8, 2)



- e Write the coordinates of the image of the following points by reflection across X-axis:

- 1 A (2, -3)                      2 B (0, 7)                      3 C (-1, 2)

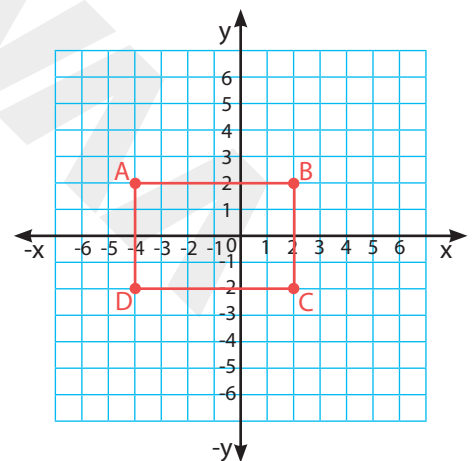
**Answer:**

- 1 Image of A by reflection across X-axis is (2, 3)  
2 Image of B by reflection across X-axis is (0, -7)  
3 Image of C by reflection across X-axis is (-1, -2)

- f Plot the points A (-4, 2), B (2, 2), C (2, -2) and D (-4, -2) on the coordinate plane, state the name of the figure ABCD produced from joining these points.

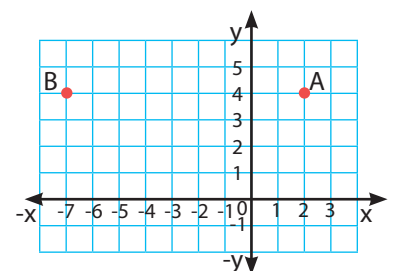
**Answer:**

- ▶ The figure ABCD is a rectangle.



- g From the opposite coordinate plane, complete:

- ▶ The coordinate of point A (2, 4).  
▶ The coordinate of point B (-7, 4).  
▶ The length of  $\overline{AB}$  is 9 units.



3

## 1 Choose the correct answer:

- a Which point is a reflection of (1, 8) across the y-axis on a coordinate plane?

[(1, -8), (-1, -8), (8, -1), (-1, 8)]

- b  $1 - 25\% =$  .....

(25%, 75, 0.75, 85%)

- c 30% of 120 = .....

(45, 35, 36, 46)

## 2 Answer each of the following:

7

- a Adham bought a TV set, its original price is 23,500 L.E. The sales tax on the TV set is 12%. What is the price of the TV set after adding the tax?

**Answer:**

The tax =  $12\% \times 23,500 = 2,820$  L.E.

The price after adding the tax =  $23,500 + 2,820 = 26,320$  L.E.

- b A fruiterer sold 20% of the amount of fruits he has. If he sold 20 kgs of fruits. How many kgs of fruits does the fruiterer have before selling?

**Answer:**

Whole = ?? , Percent = 20% , Part = 20 kg

Whole =  $20 \div 20\% = 100$  kg

The original amount of fruit = 100 kg

- c Find the distance between the point C(-2, -3) and point D(-2, -9).

**Answer:**

The distance between the points C and D =  $|-9| - |-3| = 6$  units

- d Write the coordinates of the image of each point of the following by reflection across Y-axis:

1 A (7, -2)

2 B (-1, 4)

3 C (-10, -2)

**Answer:**

1 Image of A by reflection across Y-axis is (-7, -2)

2 Image of B by reflection across Y-axis is (1, 4)

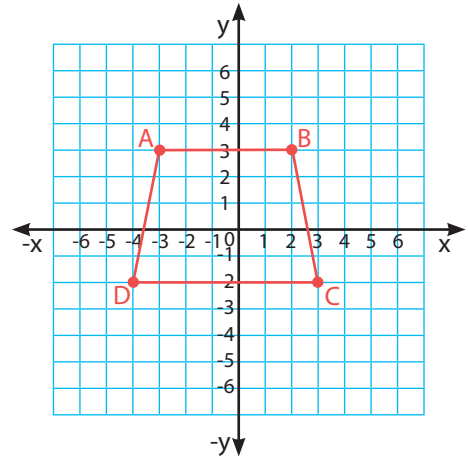
3 Image of C by reflection across Y-axis is (10, -2)

- e Plot and join the points in the given order, then complete the figure by joining the end points, and identify the figure.

A (-3, 3) , B (2, 3) , C (3, -2) , D (-4, -2)

**Answer:**

► The figure ABCD is a trapezium.



- f If the point (4, -3) is reflected across the X-axis, find the distance between the point and its reflection.

**Answer:**

- The image of the point (4, -3) by reflection across the X-axis is (4, 3)
- The distance between the point and its reflection =  $|-3| + |3| = 6$  units

- g Write the position of each of the following points in the coordinate plane:

► A (-2, 2)      ► B (3, -2)      ► C (1, 7)      ► D (0, 5)

**Answer:**

- A (-2, 2) lies in the 2<sup>nd</sup> quadrant.
- B (3, -2) lies in the 4<sup>th</sup> quadrant.
- C (1, 7) lies in the 1<sup>st</sup> quadrant.
- D (0, 5) lies on the Y-axis.

## 1 Choose the correct answer:

- a If the percentage of success in a school is 81%, then the percentage of failure is ..... %  
(81 , 20 , 19 , 40)

- b From the opposite table, the value of the unknown = .....

Whole	Part	Percent
Unknown	38	40%

( 48 , 45 , 38 , 95 )

- c A point both of its coordinates are negative lies in ..... quadrant.

(1<sup>st</sup> , 2<sup>nd</sup> , 3<sup>rd</sup> , 4<sup>th</sup> )

## 2 Answer each of the following:

- a Amal has 120 L.E. She spent  $\frac{2}{3}$  of what she has.

What is the percentage of money she spent?

**Answer:**

The money Amal spent =  $120 \times \frac{2}{3} = 80$  L.E.

The percentage of money she spent =  $(80 \div 100) \times 100\% = 80\%$

- b Islam went to a restaurant. The subtotal of the bill was 410 L.E. A 8% service charge and 5% taxes charge are added to the bill. Calculate the total sum of the bill.

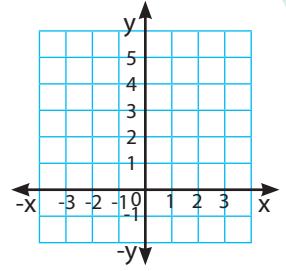
**Answer:**

The value of the service =  $8\% \times 410 = 32.8$  L.E.

The value of the tax =  $5\% \times 410 = 20.5$  L.E.

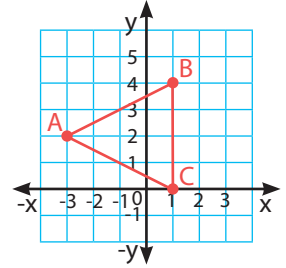
The total sum of the bill =  $410 + 32.8 + 20.5 = 463.3$  L.E.

- c Plot the points A  $(-3, 2)$ , B  $(1, 4)$ , and C  $(1, 0)$  on the opposite coordinate plane, then determine the type of the resulted triangle according to its angles measures.



**Answer:**

- The resulted triangle is an acute-angled triangle.



- d Write the position of each of the following points in the coordinate plane:

- A  $(-5, 7)$       ► B  $(6, -3)$       ► C  $(5, 3)$       ► D  $(4, 0)$

**Answer:**

- A  $(-5, 7)$  lies in the 2<sup>nd</sup> quadrant.      ► B  $(6, -3)$  lies in the 4<sup>th</sup> quadrant.  
 ► C  $(5, 3)$  lies in the 1<sup>st</sup> quadrant.      ► D  $(4, 0)$  lies on the X-axis.

- e Write the image of the following points by reflection across the X-axis:

- A  $(-1, 3)$       ► B  $(0, 9)$       ► C  $(3, 0)$

**Answer:**

- A'  $(-1, -3)$       ► B'  $(0, -9)$       ► C'  $(3, 0)$

- f Find the distance between each pair of points in the following:

1  $(-2, 4)$  and  $(-2, -1)$

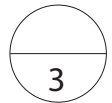
2  $(3, -1)$  and  $(7, -1)$

**Answer:**

1 The distance between  $(-2, 4)$  and  $(-2, -1) = |4| + |-1| = 4 + 1 = 5$  units

2 The distance between  $(3, -1)$  and  $(7, -1) = |7| - |3| = 7 - 3 = 4$  units

- g Complete: If the point at the position  $(-2, 3)$  has moved 2 units to the right and 3 units upwards, then its new position is  $(0, 6)$ .



## 1 Choose the correct answer:

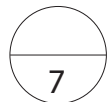
a 20% of 120 km = ..... km.

(20 , 24 , 26 , 28 )

b From the opposite table, the value of the unknown = .....

Whole	Part	Percent
420	Unknown	40%

(168 , 200 , 40% , 420 )

c The point (0 , -2) lies in/on ..... . ( Y-axis , X-axis , 3<sup>rd</sup> quadrant , 4<sup>th</sup> quadrant)

## 2 Answer each of the following:

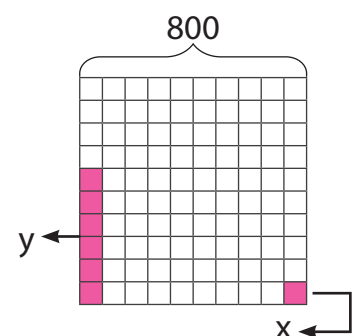
a A car price is 350,000 L.E. The owner gives a 15% discount on it. Calculate the selling price of the car after the discount.

**Answer:**The value of discount =  $350,000 \times 15\% = 52,500$  L.E.The price of the car after the discount =  $350,000 - 52,500 = 297,500$  L.E.

b Salem has 120 pens in his bag. If 20% of them are red, then find the number of red pens in his bag.

**Answer:**The number of red pens in the bag =  $120 \times 20\% = 24$  red pens

c Complete:

From the following  $10 \times 10$  grid:  $x + y = 56$ 

- d A piece of cloth of 30 meters long, was put in water, it shrank by 3%. What is its length after shrinking?

**Answer:**

The cloth shrank by  $= 30 \times 3\% = 0.9$  meters

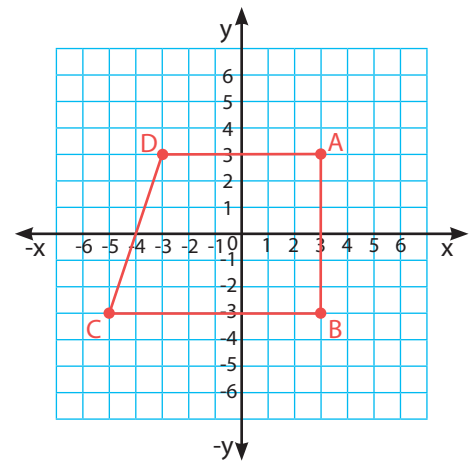
The length after shrinking  $= 30 - 0.9 = 29.1$  meters

- e Plot and join the points in the given order, then complete the figure by joining the end points, and identify the shape.

A (3, 3) , B (3, -3) , C (-5, -3) , D (-3, 3)

**Answer:**

► The shape is a trapezium.



- f Find the distance between the point C (5, -2) and point D (5, 6).

**Answer:**

The distance between the points C and D  $= |-2| + |6| = 8$  units

- g Write the position of each of the following points in the coordinate plane:

1 A (0, 2)

2 B (1, -3)

**Answer:**

1 A (0, 2): lies on Y-axis.

2 B (1, -3): lies in 4<sup>th</sup> quadrant.

3

## 1 Choose the correct answer:

- a  $33\% + 42\% = \dots\dots\dots$  . (59 , 0.75 , 100% , 3%)
- b Which point is a reflection of (7 , -2) across the Y-axis on the coordinate ptane?  
[ (7 , 2) , (-7 , 2) , (7 , -2) , (-7 , -2) ]
- c From the opposite table, the value of the unknown =  $\dots\dots\dots$  .

Whole	Part	Percent
Unknown	60	30%

( 100 , 120 , 180 , 200 )

## 2 Answer each of the following:

7

- a Younis bought a TV set for 45,000 pounds, he paid 25% of its price.

How much money did he pay?

**Answer:**

Younis paid =  $45,000 \times 25\% = 11,250$  pounds

- b The price of a car is 600,000 L.E. and the sales tax on the car is 12%. What is the price of the car after adding the tax?

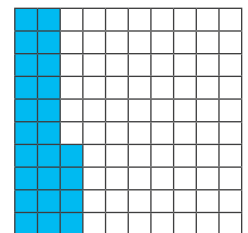
**Answer:**

The value of the tax =  $600,000 \times 12\% = 72,000$  pounds

The price of the car after adding the tax =  $600,000 + 72,000 = 672,000$  pounds

- c Using the given model:

Find 24% of the number 82



**Answer:**

Each part of the model represents =  $82 \div 100 = 0.82$

Then 24% of 82 =  $24 \times 0.82 = 19.68$



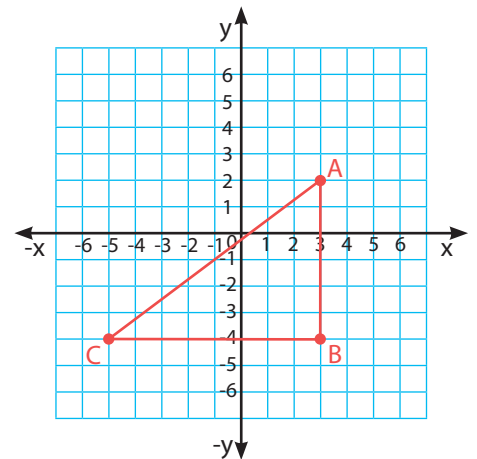
**d Complete:**

Aliaa plotted a point on the coordinate plane 4 units to the right of the origin point and 2 units up, then the ordered pair representing the point is **(4, 2)**.

- e** Graph the points A (3, 2), B (3, -4) and C (-5, -4), join them to draw the triangle ABC and find the images of each point by reflection across the X-axis.

**Answer:**

- ▶ The image of point A (3, 2) by reflection across X-axis is (3, -2).
- ▶ The image of point B (3, -4) by reflection across X-axis is (3, 4).
- ▶ The image of point C (-5, -4) by reflection across X-axis is (-5, 4).



- f** Mention the position of each point of the following in the coordinate plane:

**1** A (8, 0)

**2** B (-1, 3)

**Answer:**

- 1** A (8, 0): lies on X-axis.
- 2** B (-1, 3): lies in 2<sup>nd</sup> quadrant.

- g** Find the distance between each pair of the points of the following:

**1** (3, 4) and (-3, 4)

**2** (0, 4) and (0, 1)

**Answer:**

- 1** The distance between (3, 4) and (-3, 4) =  $|3| + |-3| = 3 + 3 = 6$  units
- 2** The distance between (0, 4) and (0, 1) =  $|4| - |1| = 4 - 1 = 3$  units

# كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9



حمل الآن

مجاناً وحصرياً

# المراجعة رقم (2)

## اختبار شهر مارس



**April Tests**

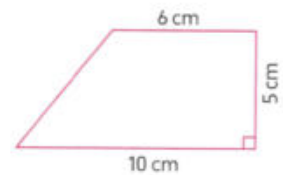
From lesson 8 unit 10 – To lesson 4 unit 12

**Test 1**

Total mark  
**10**

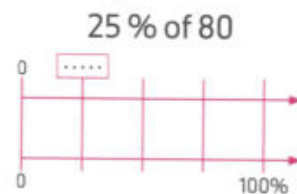
**1. Choose the correct answer.**

- If the point  $(-1, 3)$  is moved 2 units to the right and 4 units down, then the new point is \_\_\_\_\_  
 A.  $(-3, 7)$       B.  $(1, 7)$       C.  $(1, -1)$       D.  $(3, 1)$
- The area of the opposite trapezium = \_\_\_\_\_  $\text{cm}^2$   
 A. 40      B. 50  
 C. 80      D. 110
- If the price of a shirt is 200 L.E., then  $\frac{1}{2}\%$  of its price = \_\_\_\_\_ L.E.  
 A. 2      B. 10      C. 1      D. 0.5



**2. Answer the following questions.**

- Use the given model to find the missing.

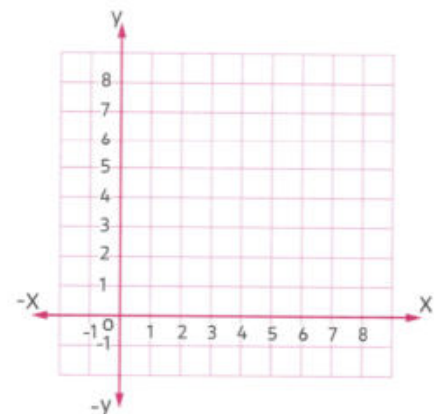


- Locate the following points on the coordinate plane.

A  $(3, 7)$ ,

B  $(6, 0)$ ,

point C is 3 units to the left of point B and 4 units up.



- If the height of a rhombus is 8 cm and its area is  $72 \text{ cm}^2$ .  
Find its side length.

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4. There are 250 pupils in a school , 15 pupils of them were absent in one day.  
Find the percentage of absentees on that day.

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5. The price of a mobile phone before a discount is 3,000 pounds.  
If the discount is 10 %. What is its price after the discount ?

---



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6. Which one is greater in area ?

A triangle with base length 8 cm and it's corresponding height 3.4 cm  
or a rhombus of side length 10 cm and a height 2.5 cm.

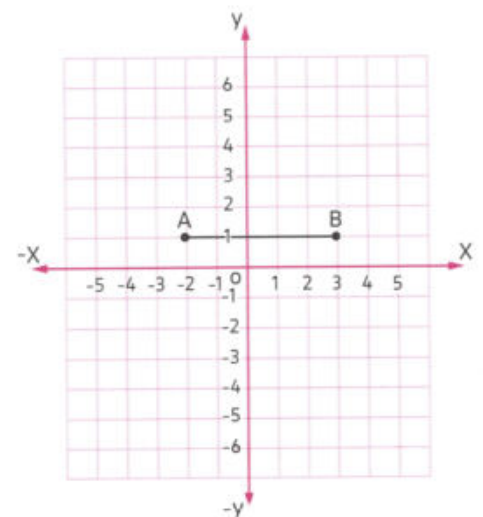
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7. In the opposite figure :

Write the coordinates of the point A and B





Test 2

Total mark  
10

1. Choose the correct answer.

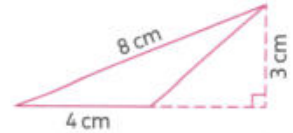
1. From the opposite figure ,  
if the distance between A and B is 200 , then  $x =$  \_\_\_\_\_

A. 350                      B. - 350                      C. - 50                      D. 50



2. The area of the opposite triangle = \_\_\_\_\_  $\text{cm}^2$

A.  $\frac{1}{2} \times 4 \times 8$                       B.  $\frac{1}{2} \times 4 \times 3$   
C.  $\frac{1}{2} \times 8 \times 3$                       D.  $\frac{8}{2} \times 3$



3. 20 % of 40 kg = \_\_\_\_\_ kg

A. 16                      B. 12                      C. 8                      D. 4

2. Answer the following questions.

1. Which is best to buy ?

First : 15 kg per 30 L.E.

Second : 12.5 L.E. per 5 kg

---

---

2. The two base lengths of a parallelogram are 10 cm and 8 cm. The smaller height is 5 cm.  
Find the area of the parallelogram.

---

3. Youssef bought a car for 70,000 pounds , he paid 25 % of its price.  
How much money did he pay ?

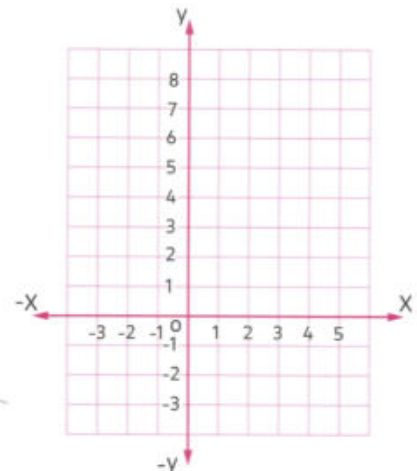
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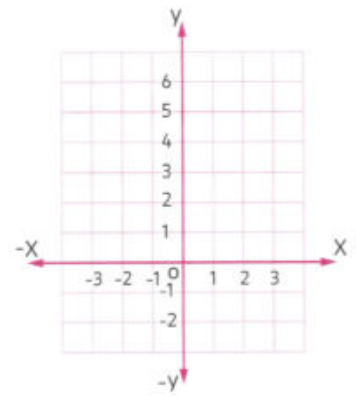
4. Plot the two ordered pairs and  
find the distance between them :

A (2 , 5) , B (2 , 8)

Distance = \_\_\_\_\_



5. Plot the points A (2, 5), B (-2, 5) and C (-2, -1), then determine the type of the shape.



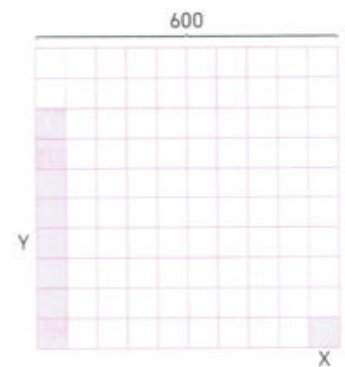
6. Which one is greater in area?  
A parallelogram whose base length is 12 cm and its corresponding height is 10 cm or a rectangle whose dimensions are 14 cm and 8 cm.

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7. From the opposite 10 × 10 grid, Find. X + Y



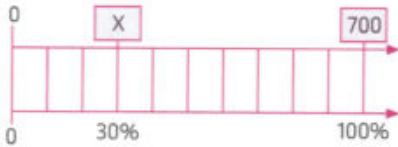
## 1. Complete.

1.  $\frac{2}{5} = \text{-----} \%$  [El Beheira 24]
2.  $\frac{x}{4} = 25 \%$ , then  $x = \text{-----}$  [Cairo 24]
3.  $1 - 25 \% = \text{-----} \%$  [Cairo 24]
4.  $30 \%$  of  $100 = \text{-----}$  [Giza 24]
5.  $70 \%$  of  $210$  is  $\text{-----}$  [Alex. 24]
6.  $33\frac{1}{3} \%$  of  $60 = \text{-----}$  [Luxor 24]
7.  $30 \%$  of  $50 \text{ kg} = \text{-----} \text{ kg.}$  [Cairo 24]
8.  $15 \%$  of  $240 \text{ kg} = \text{-----} \text{ kg.}$  [El Menia 24]
9.  $4.8 \text{ km} = \text{-----} \text{ meters.}$  [Cairo 24]
10.  $2\frac{1}{4} \text{ day} = \text{-----} \text{ hours.}$  [Cairo 24]
11.  $3.4 \text{ L} = \text{-----} \text{ mL}$  [Cairo 24]
12.  $\frac{48 \text{ km}}{1 \text{ hr}} \times \frac{1,000 \text{ m}}{1 \text{ km}} \times \frac{1 \text{ hr}}{60 \text{ min}} = \frac{\text{---} \text{ m}}{\text{---} \text{ min}}$  [Cairo 24]
13.  $1.75 \text{ km} \times \text{-----} = \text{-----} \text{ m.}$  [Alex. 24]
14.  $4.8 \text{ L} \times \text{-----} = 4,800 \text{ mL.}$  [Cairo 24]
15.  $20 \%$  of pupils in the class is  $5$  pupils, then the total number of pupils in the class is  $\text{-----}$  [Luxor 24]
16. If the percent of boys in a school is  $62 \%$ , then the percent of girls is  $\text{-----} \%$  [Cairo 24]
17. If  $10 \%$  of an amount of money is  $50 \text{ L.E.}$ , then the total amount is  $\text{-----} \text{ L.E.}$  [El Monofia 24]
18. From the opposite number line the unit rate is  $\text{-----}$
19.  $150 \text{ km per } 3 \text{ hours} = \text{-----} \text{ km per hour.}$  [Cairo 24]
20. A motorcycle covers  $160 \text{ km}$  in  $4 \text{ hours}$ , then the rate of the speed is  $\text{-----} \text{ km/hr}$  [Giza 24]
21.  $18 \text{ km per hour} = \text{-----} \text{ m per min.}$  [Luxor 24]
22. The unit rate of an agriculture machine plough  $16 \text{ feddan}$  in  $2 \text{ hours}$  is  $\text{-----}$  [El Beheira 24]



## 2. Choose the correct answer.

1.  $\frac{1}{2} = \text{-----} \%$  [Cairo 24]  
 A. 25                      B. 50                      C. 55                      D. 100
2.  $\frac{1}{4} = \text{-----} \%$  [El Beheira 24]  
 A. 40                      B. 10                      C. 50                      D. 25
3. 100 % is equivalent to ----- [Alex. 24]  
 A. 100                      B. 10                      C. 1                      D. 0.1
4. 5 to 10 = ----- % [Cairo 24]  
 A. 50                      B. 5                      C. 0.5                      D. 20
5. 90 % - 75 % = ----- % [Giza 24]  
 A. 175                      B. 15                      C. 25                      D. 2.5
6.  $1 - 75 \% = \text{-----} \%$  [Cairo 24]  
 A. 0.25                      B. 25                      C. 2.5                      D. 30
7.  $1 - [20 \% + 35 \%] = \text{-----} \%$  [Giza 24]  
 A. 45                      B. 4.5 %                      C.  $\frac{9}{20}$                       D. 0.045
8.  $1 - [39 \% + 0.21] = \text{-----} \%$  [Alex. 24]  
 A. 0.4                      B. 4                      C. 25                      D. 40
9. 25 % of 140 = ----- [Cairo 24]  
 A. 35                      B. 80                      C. 70                      D. 4
10. 20 % of 40 = ----- [Cairo 24]  
 A. 800                      B. 8                      C. 80                      D. 0.8
11. 60 % of 40 = ----- [Cairo 24]  
 A. 4                      B. 24                      C. 240                      D. 18
12. 12 % of 300 = ----- [Cairo 24]  
 A. 12                      B. 24                      C. 36                      D. 48
13. 30 % of 50 kg = ----- kg. [Luxor 24]  
 A. 5                      B. 10                      C. 15                      D. 20
14. 20 % from 90 pounds = ----- pounds. [El Monofia 24]  
 A. 9                      B. 18                      C. 27                      D. 180
15. If the percentage of boys in a school is 52 % , then the percentage of girls is ----- % [El Menia 24]  
 A. 52                      B. 48                      C. 0.48                      D. 0.52

16. If the percentage of success in a school is 85 % , then the percentage of failure is \_\_\_\_\_ % [Port Said 24]  
 A. 100                      B. 20                      C. 15                      D. 85
17. From the opposite double number line  
 ,  $x =$  \_\_\_\_\_ [El Menia 24]  
 A. 70                      B. 140  
 C. 210                      D. 420
- 
18. 20% of the students in a class are wearing black. There are 40 students in the class.  
 How many students are wearing black ? [Luxor 24]  
 A. 4                      B. 8                      C. 12                      D. 16
19. Ahmed got 100 % in the math exam , so he answered correctly \_\_\_\_\_ of the questions. [El Beheira 24]  
 A. quarter                      B. half                      C. all                      D. otherwise
20. 22 % of 44 \_\_\_\_\_ 44 % of 22 [El Menia 24]  
 A. >                      B. =                      C. <
21. \_\_\_\_\_ is a comparison between two quantities with different units. [Port Said 24]  
 A. Rate                      B. Ratio                      C. Place value                      D. Otherwise
22. Which of the following is not a unit rate ? [El Beheira 24]  
 A. 5 cards per a player.                      B. 3 km per an hour.  
 C. 3 cups per 7 loaves of bread.                      D. 30 L.E. per a toy.
23. 180 km per hour = \_\_\_\_\_ m per min. [Cairo 24]  
 A. 3                      B. 30                      C. 300                      D. 3,000
24. 60 m per min = \_\_\_\_\_ m per sec. [Giza 24]  
 A. 1                      B. 10                      C. 100                      D. 1,000
25. Which of the following is conversion factor ? [Cairo 24]  
 A.  $\frac{3 \text{ km}}{1 \text{ hr}}$                       B.  $\frac{60 \text{ min}}{1 \text{ sec}}$                       C.  $\frac{1 \text{ week}}{7 \text{ days}}$                       D.  $\frac{1 \text{ day}}{100 \text{ m}}$
26. Which of the following is not a unit rate ? [Luxor 24]  
 A. 140 L.E. weekly.                      B. 90 km per 60 minutes.  
 C. 25 L.E. for each kg.                      D.  $\frac{1}{2}$  kg of flour per a cake.
27. Which of the following is a unit rate ? [Cairo 24]  
 A. 30 L.E. per 5 kg.                      B. 450 km per 3 hours.  
 C. 90 km per hour.                      D. 540 km per 20 liter.
28. Soad read 45 pages in 15 days , then the rate of her performance = \_\_\_\_\_ pages/day. [El Monofia 24]  
 A. 8                      B. 12                      C. 3                      D. 20

29. A car consumes  $\frac{1}{10}$  liter of petrol to cover 1 km , then it covers \_\_\_\_\_ km per liter. [El Menia 24] [Cairo 24]
- A. 1                      B. 5                      C. 10                      D. 20
30. If a car covered 180 km in 3 hours , then the car covers \_\_\_\_\_ km in 2 hours. [Cairo 24]
- A. 60                      B. 120                      C. 180                      D. 740
31. 36 L.E. for 6 kg , then the cost of 3 kg is \_\_\_\_\_ L.E. [Cairo 24]
- A. 2                      B. 12                      C. 16                      D. 18
32. 0.25 kg = \_\_\_\_\_ gm. [Cairo 24]
- A. 25                      B. 250                      C. 2,500                      D. 25,000
33. 360 sec = \_\_\_\_\_ hour[s] [El Menia 24] [Cairo 24]
- A. 60                      B. 10                      C. 3,600                      D. 0.1
34.  $\frac{1 \text{ km}}{1000 \text{ m}}$  is a conversion factor. [Giza 24]
- A. 1000 m                      B. 100 m                      C. 1 m                      D. 10 m
35.  $\frac{1 \text{ kg}}{1000 \text{ g}}$  is a conversion factor. [Alex. 24]
- A. 2 hours                      B. 100 cm                      C. 1,000 g                      D. 1,000 m
36.  $9 \text{ km} \times \frac{1000 \text{ m}}{1 \text{ km}} = 9,000 \text{ m}$  [El Monofia 24] [Cairo 24]
- A.  $\frac{1,000 \text{ m}}{1 \text{ km}}$                       B.  $\frac{1,000 \text{ g}}{1 \text{ kg}}$                       C.  $\frac{100}{1 \text{ km}}$                       D.  $\frac{1 \text{ km}}{1,000 \text{ m}}$

3. Answer the following.

1. 80 children from a school went to a trip and this is 40 % of all children in the school.  
How many children are in the school in all ? [Giza 24]
- \_\_\_\_\_
2. If the number of pupils in a school is 700. One day 10 % of them were absent, find the number of the present pupils that day. [El Monofia 24]
- \_\_\_\_\_
3. Sara bought a car for 200,000 L.E. , she paid 10 % of its price.  
How much money did she pay ? [Giza 24]
- \_\_\_\_\_
4. If the zoo receives 800 kg of food daily , and the percentage eaten by zebra is 60 %.  
Find the number of kilograms that the zebra eats. [El Beheira 24]
- \_\_\_\_\_

5. A man bought a T.V. set. He was given a 15 % discount of its marked price was 8,500 L.E.  
Find its price after discount. [Luxor 24]

---

6. On the sale , a shop offers a discount 20 % , if the price of a dress is 1,600 LE  
Find the price of it after discount. [Cairo 24]

---

7. The price of a T.V. is 8,500 L.E. with discount 10 %. Calculate the discount value. [Cairo 24]

---

8. Ahmed bought a flat for 420,000 L.E. , he paid 20 % of its price.  
How much money did he pay ? [Cairo 24]

---

9. A dinner bill is 400 L.E. There's a 10 % tax. Calculate the bill after adding the tax. [Alex. 24]

---

10. The price of a T.V. set is 20,000 L.E. The T.V. is on sale for 15 % on a white Friday sale.  
Find the selling price of the T.V. [Cairo 24]

---

11. Mona ate 4 apples of 20 apples. Find the percentage of the number of apples she ate. [Port Said 24]

---

12. A factory produces 7,200 bottles of soda in 8 hours. What is the rate of production ? [Cairo 24]

---

13. Two machines produce cloth , the first one produce 365 meters in 5 hours and the second produce 480 meters in 6 hours. Which machine is better ? [Cairo 24]

---

14. In a mathematics exam ,Youssef got 38 marks of 40 marks.  
Find the percentage of the marks he got. [El Menia 24]

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## 1. Complete.

- The point  $(3, 5)$  lies in the \_\_\_\_\_ quadrant. [Giza 24]
- The point  $(5, -2)$  lies in the \_\_\_\_\_ quadrant. [El Monofia 24]
- The point  $(-3, -4)$  lies in the \_\_\_\_\_ quadrant. [El Menia 24]
- The ordered pair that represents the origin point is (\_\_\_\_\_, \_\_\_\_\_) [El Monofia 24]
- In the point  $(3, 8)$  the y-coordinate is \_\_\_\_\_. [Alex. 24]
- The point  $(-4, 0)$  lies on the \_\_\_\_\_-axis. [Giza 24]
- The two points  $(5, \text{_____})$  and  $(-2, 6)$  lie on the same line. [Cairo 24]
- The points  $(-4, 5)$  and  $(7, 5)$  lie on the same \_\_\_\_\_ line. [El Beheira 24]
- The distance between A and B is \_\_\_\_\_ units.



- The distance between 2, 7 on the number line is \_\_\_\_\_ units. [El Monofia 24]
- The distance between the two numbers 6 and  $-4$  on the number line is \_\_\_\_\_ units. [Port Said 24]
- The point  $(4, 5)$  is located at distance \_\_\_\_\_ units from y-axis. [Giza 24]
- The point  $(3, 4)$  is located at distance \_\_\_\_\_ units from x-axis. [Giza 24]
- What is the distance between the points  $(4, -7)$  and  $(-5, -7)$ ? \_\_\_\_\_. [Cairo 24]
- If the point A  $(2, 7)$  moved 2 units to the right and 5 units down, then the point A will be (\_\_\_\_\_, \_\_\_\_\_) [Luxor 24]
- The image of the point  $(-2, -5)$  by reflection in the x-axis is the point \_\_\_\_\_. [El Menia 24]
- The point  $(4, 5)$  by reflection in the x-axis is the point \_\_\_\_\_. [Cairo 24]
- The image of the point  $(-2, 3)$  by reflection in x-axis is the point \_\_\_\_\_. [Cairo 24]
- The point  $(3, -3)$  by reflection in the x-axis is (\_\_\_\_\_, \_\_\_\_\_) [Cairo 24]
- The reflection of the point  $(2, -4)$  in y-axis is \_\_\_\_\_. [El Monofia 24]
- The image of the point  $(-2, 5)$  by reflection across the y-axis is \_\_\_\_\_. [Cairo 24]
- The reflection of the point  $(8, 1)$  in the y-axis is \_\_\_\_\_. [Cairo 24]

## 2. Choose the correct answer.

- If the x-coordinate of a point is zero, then the point lies \_\_\_\_\_. [Alex. 24]  
 A. in 1<sup>st</sup> quadrant. B. in 2<sup>nd</sup> quadrant. C. on x-axis. D. on y-axis.

2. The y-coordinate in the ordered pair (3, 5) is \_\_\_\_\_ [Cairo 24]  
 A. 4                      B. 3                      C. 5                      D. 2
3. In the point (1, 2) the x-coordinate is \_\_\_\_\_ [Cairo 24]  
 A. 4                      B. 3                      C. 2                      D. 1
4. The point \_\_\_\_\_ lies on x-axis. [El Menia 24]  
 A. (1, 0)                      B. (0, 1)                      C. (2, 5)                      D. (-1, -5)
5. The point \_\_\_\_\_ lies in the second quadrant. [Cairo 24]  
 A. (3, 3)                      B. (3, -3)                      C. (-3, 3)                      D. (-3, -3)
6. The point (3, -5) lies in the \_\_\_\_\_ quadrant. [El Beheira 24]  
 A. first                      B. second                      C. third                      D. fourth
7. The point (-2, 3) lies in the \_\_\_\_\_ quadrant. [Port Said 24]  
 A. first                      B. second                      C. third                      D. fourth
8. The point (-2, -4) lies in the \_\_\_\_\_ quadrant. [Cairo 24] [Giza 24]  
 A. first                      B. second                      C. third                      D. fourth
9. If P(5, 1), Q(8, 0), R(0, 4), S(0, 5) and O(0, 0) are plotted on the coordinate plane, then the point [S] on the x-axis is/are \_\_\_\_\_ [Cairo 24]  
 A. P and R                      B. S and R                      C. only Q                      D. Q and O
10. Which of the following points lies on the x-axis? [Cairo 24]  
 A. (5, 0)                      B. (0, 3)                      C. (1, 1)                      D. (6, 2)
11. The point which is plotted on y-axis is \_\_\_\_\_ [Cairo 24] [Qena 24]  
 A. (5, 0)                      B. (-5, 0)                      C. (0, -2)                      D. (-2, -2)
12. If the point (A, 5) lies on y-axis, then the value of A = \_\_\_\_\_ [Port Said 24]  
 A. 0                      B. 5                      C. 1                      D. 10
13. The point \_\_\_\_\_ lies on x-axis. [El Monofia 24]  
 A. (-3, 0)                      B. (0, -1)                      C. (-2, 1)                      D. (4, 3)
14. The point which is plotted 5 units to the left of the origin point and 2 units up is \_\_\_\_\_ [Luxor 24]  
 A. (5, 2)                      B. (-5, -2)                      C. (-5, 2)                      D. (2, -5)
15. In the opposite number line :  
 The length of  $\overline{AB}$  = \_\_\_\_\_ length units. [Cairo 24]  
 A. 1                      B. 2                      C. 3                      D. 4



16. The distance between the points A and B

is \_\_\_\_\_ units.



- A. 3                      B. 2                      C. 5                      D. 1

[Giza 24]

17. The distance between the point
- $(0, -4)$
- and the origin point

is \_\_\_\_\_ units

- A. 0                      B. 4                      C. -4                      D. 8

[El Menia 24]

18. The distance between the two points
- $(-1, 2)$
- and
- $(6, 2)$

equals \_\_\_\_\_ units.

- A. 0                      B. 5                      C. 7                      D. 16

[El Monofia 24]

19. The distance between the point
- $(-1, 3)$
- and the point
- $(-1, 5)$
- is \_\_\_\_\_ unit. [Cairo 24]

- A. 2                      B. 3                      C. 4                      D. 5

20. The distance between the points A
- $(5, -5)$
- and B
- $(5, 4)$
- = \_\_\_\_\_ units.

[Cairo 24]

- A. 0                      B. 1                      C. 9                      D. 10

21. The point
- $(3, -1)$
- by reflection in the y-axis is the point \_\_\_\_\_

[El Menia 24]

- A.  $(-3, 1)$               B.  $(-3, -1)$               C.  $(3, 1)$                       D.  $(1, -3)$

22. The reflection of the point
- $(-2, -5)$
- in y-axis is ( \_\_\_\_\_ , \_\_\_\_\_ )

[Souhag 24]

- A.  $(-2, -5)$               B.  $(2, -5)$                       C.  $(-2, 5)$                       D.  $(2, 5)$

23. The distance between the point
- $(5, 3)$
- and the y-axis is \_\_\_\_\_ units.

[Cairo 24]

- A. 5                      B. 8                      C. 3                      D. 2

24. The reflection of
- $(-2, 5)$
- in the y-axis is \_\_\_\_\_

[Alex. 24]

- A.  $(5, -2)$               B.  $(-2, -5)$                       C.  $(2, 5)$                       D.  $(2, -5)$

25. The reflection of the point
- $(12, -8)$
- in the y-axis is \_\_\_\_\_

[Port Said 24]

- A.  $(-12, -8)$               B.  $(8, 12)$                       C.  $(-8, 12)$                       D.  $(12, 8)$

26. The image of the point
- $(-2, -5)$
- by reflection in the x-axis is the point \_\_\_\_\_

[Cairo 24]

- A.  $(-2, 5)$               B.  $(2, 5)$                       C.  $(2, -5)$                       D.  $(-2, -5)$

27. The image of the point
- $(2, -4)$
- by reflection in x-axis is \_\_\_\_\_

[Luxor 24]

- A.  $(2, 4)$                       B.  $(-2, -4)$                       C.  $(2, -4)$                       D.  $(-2, 4)$

28. The image of the point
- $(-2, 5)$
- by reflection in the x-axis is the point \_\_\_\_\_

[El Beheira 24]

- A.  $(2, -5)$                       B.  $(2, 5)$                       C.  $(-2, -5)$                       D.  $(-2, 5)$

29. The point
- $(4, 7)$
- by reflection in the x-axis is the point \_\_\_\_\_

[Qena 24]

- A.  $(4, -7)$                       B.  $(-4, 7)$                       C.  $(4, -11)$                       D.  $(-4, -7)$

30. If the two points A (1, 2) and B (5, 4) are two vertices of a right-angled triangle ABC, then the point C could be \_\_\_\_\_

[Cairo 24]

A. (1, 4)

B. (2, 5)

C. (5, 4)

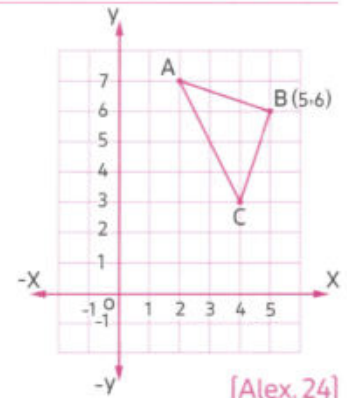
D. (4, 1)

3. Answer the following.

1. Use the opposite figure, to find :

a. Point A ( \_\_\_\_\_ , \_\_\_\_\_ )

b. Point C ( \_\_\_\_\_ , \_\_\_\_\_ )



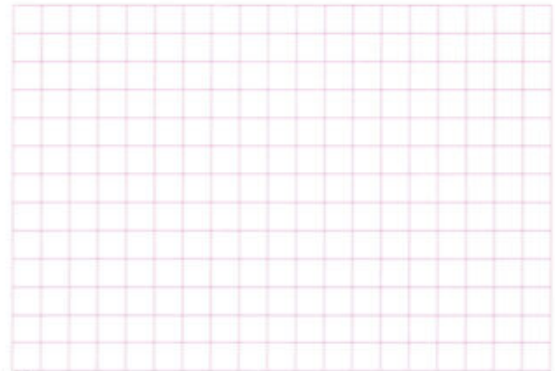
[Alex. 24]

2. Represent the x-axis and y-axis, then plot the points :

a. A (3, 1)

b. B (1, 3)

[El Beheira 24]



3. Graph the points A (1, 4) and B (1, -3), then find the distance between A and B

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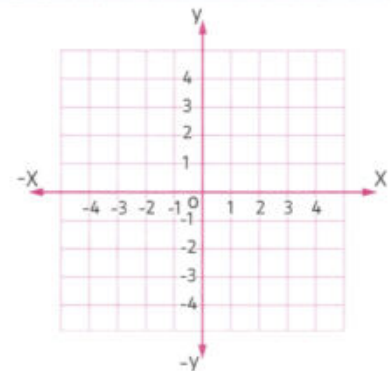
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[Cairo 24]

4. Locate the following points on the coordinate plane and connect the points in order A (1, 1), B (1, 5), C (4, 5), D (4, 1), identify the shape.

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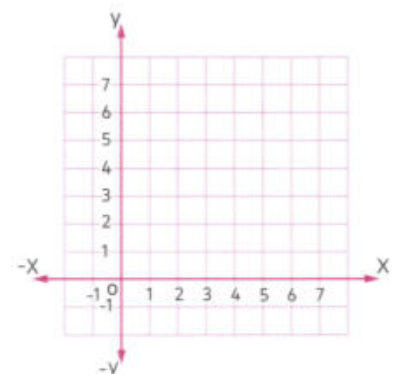
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[El Monofia 24]



5. Plot the points  $A(1, -2)$ ,  $B(1, 2)$ ,  $C(-3, 2)$ ,  $D(-3, -2)$

What is the name of the figure ABCD ?

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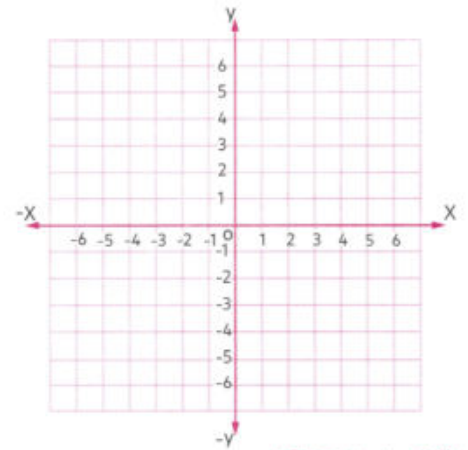
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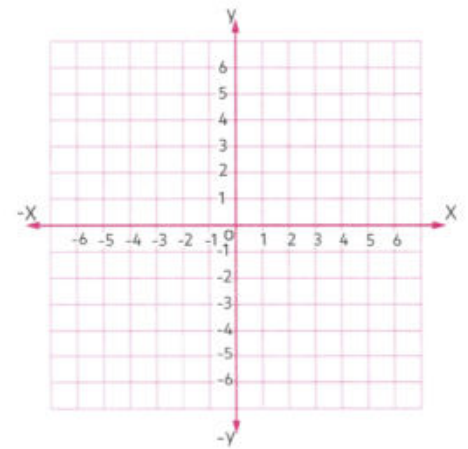


[El Beheira 24]

6. Graph the points  $A(6, 1)$ ,  $B(6, 4)$ ,  $C(-2, 4)$

What is the coordinate of the point D such that ABCD is a rectangle.

$D = ( \quad , \quad )$



[Cairo 24]

7. In the opposite coordinate plane :

- a. Graph the points :

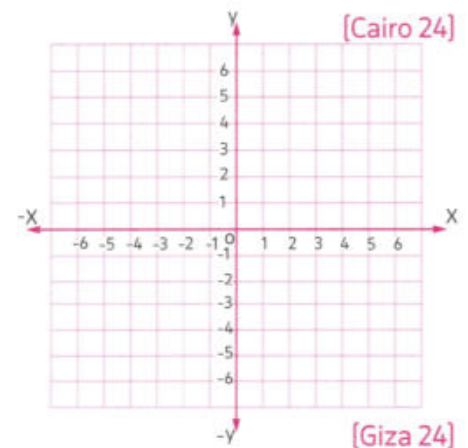
$A(4, -2)$ ,  $B(4, 2)$

$C(-4, 2)$  and  $D(-4, -2)$

- b. Connect the points

, what is the name of the figure ABCD ?

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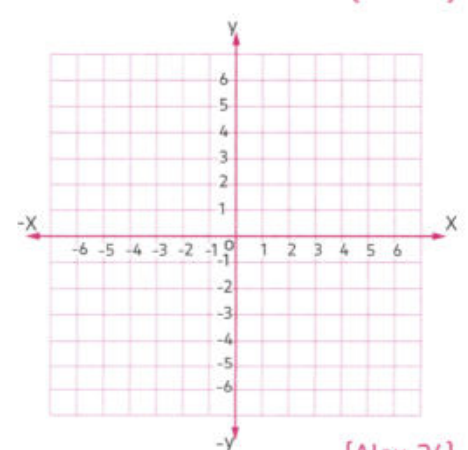
[Giza 24]

8. Plot the points on the coordinate grid :

$A(3, -3)$ ,  $B(-3, -1)$ ,  $C(2, 2)$

Then complete :

The figure is a \_\_\_\_\_

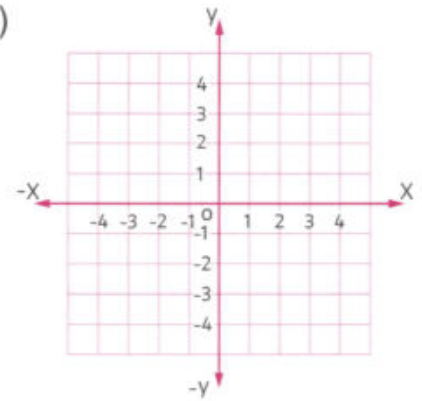


[Alex. 24]

9. Plot the points  $A(1, -1)$ ,  $B(1, 3)$ ,  $C(-3, 3)$  and  $D(-3, -1)$

What is the name of the figure ABCD ?

---



[El Menia 24]

10. Plot the points  $A(2, 4)$ ,  $B(2, 1)$ ,  $C(5, 4)$   
Join them and find the image of each one  
by reflection across the  $y$ -axis.

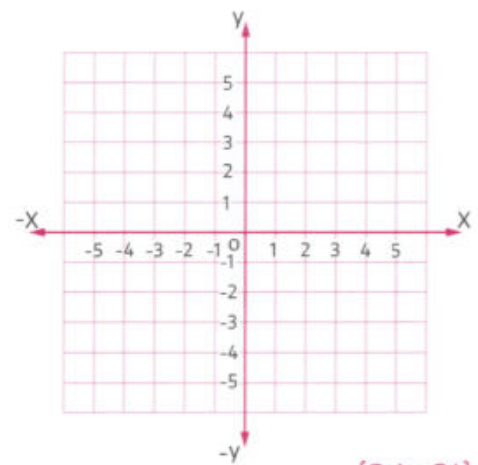
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[Cairo 24]

حمل الآن

مجانا وحصريا

# المراجعة رقم (3)

## اختبار شهر مارس



# Unit 10

## Q1 / Choose the correct answer :-

1) Which of the following is not unit rate ?

- a) 140 L.E.weekly      b) 90 km per 60 minutes      c) 25 L.E. for each kg      d) 2 kg of flour per a cake

2) 30 LE. for 5 kg , then the cost of 30 kg is .....

- a) 5      b) 30      c) 90      d) 180

3) A car consumes  $\frac{1}{10}$  liter of petrol to cover 1 km , then it covers ..... km per liter.

- a) 1      b) 5      c) 10      d) 20

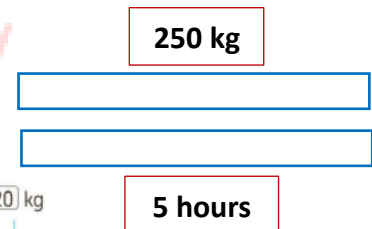
4) The missing numbers in the opposite ratio table are .....

Kg	1	2	3	4
L.E.	.....	.....	.....	200

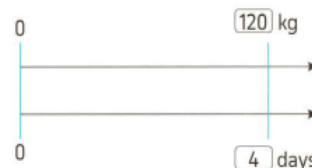
- a) 40 , 80 , 120      b) 50 , 100 , 150      c) 45 , 90 , 135      d) 60 , 120 , 180

5) The unit rate of the opposite tape diagram is .....

- a) 250 km per 5 hours      b) 50 km per hour  
c) 55 km per hour      d) 100 km per 2 hours



6) By using the opposite double number line , the unit rate is .....



- a) 60 kg per day      b) 30 kg per day      c) 60 kg per 2 days      d) 100 kg per 3 days

7) Which of the following is a conversion factor?

- a)  $\frac{3km}{1h}$       b)  $\frac{60min}{1sec}$       c)  $\frac{7days}{1week}$       d)  $\frac{1km}{1000cm}$

8) Which of the following is NOT a conversion factor?

- a) 1 h = 3600 sec      b) 12 months : 1 year      c) 1000 mm = 1 liter      d)  $\frac{1min}{60sec}$



9)  $\frac{1 \text{ km}}{\dots}$  is a conversion factor ?

- a) 1 hour                      b) 1000 m                      c) 100 m                      d) 10000mm

10)  $\frac{60 \text{ km}}{1 \text{ h}} \times \dots = \frac{60000 \text{ m}}{1 \text{ h}}$

- a)  $\frac{1 \text{ km}}{1000 \text{ m}}$                       b)  $\frac{1000 \text{ km}}{1 \text{ m}}$                       c)  $\frac{1 \text{ m}}{1000 \text{ km}}$                       d)  $\frac{1000 \text{ m}}{1 \text{ km}}$

11) 120 m per min = ..... cm per sec

- a) 12000                      b) 200                      c) 720                      d) 1200

12) 3.6 L  $\times$  ..... = 3600 mL

- a)  $\frac{1000 \text{ l}}{1 \text{ ml}}$                       b)  $\frac{100 \text{ ml}}{1 \text{ l}}$                       c)  $\frac{1000 \text{ ml}}{1 \text{ l}}$                       d)  $\frac{1 \text{ l}}{1000 \text{ ml}}$

13)  $2\frac{1}{4}$  day = ..... hours .

- a) 54                      b) 48                      c) 2400                      d) 24

14) 360 sec = .....h.

- a) 60                      b) 10                      c) 3600                      d) 0.1

15) The conversion factor to convert the speed from m per min to km per hr is .....

- a)  $\frac{60 \text{ min}}{1 \text{ h}}$                       b)  $\frac{1 \text{ km}}{1000 \text{ m}}$                       c)  $\frac{1 \text{ h}}{60 \text{ min}} \times \frac{1 \text{ km}}{1000 \text{ m}}$                       d)  $\frac{1 \text{ km}}{1000 \text{ m}} \times \frac{60 \text{ min}}{1 \text{ h}}$

16) 60 meters per hour = ..... meter(s) per min.

- a) 3600                      b) 120                      c) 360                      d) 1

17)  $\frac{1 \text{ m}}{\dots}$  is NOT a conversion factor

- a) 100 cm                      b) 1000 mm                      c) 0.001 km                      d) 60 min

18) 4.8 L  $\times \frac{\dots}{\dots} = 4800 \text{ ml}$

- a)  $\frac{100 \text{ ml}}{1 \text{ L}}$                       b)  $\frac{1000 \text{ L}}{1 \text{ ml}}$                       c)  $\frac{1000 \text{ ml}}{1 \text{ l}}$                       d)  $\frac{1 \text{ l}}{1000 \text{ ml}}$

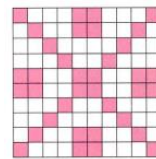
19) If the price of one kilogram of orange is 15 L.E. then the price of 4 kg

- a)  $3\frac{3}{4}$                       b) 30                      c) 90                      d) 60

20)  $3 : 10 = \dots\dots\dots \%$

- a) 30                      b) 12                      c) 25                      d) 36

21) The opposite shaded area represents each of the following except .....



- a) 36                      b) 0.36                      c) 36%                      d)  $\frac{9}{25}$

22) 50% of a number = .....

- a) the whole number    b) half of a number    c) third of a number    d) quarter of number

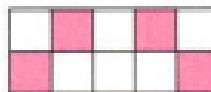
23) Which value is NOT equivalent to 55% ?

- a)  $\frac{11}{20}$                       b)  $\frac{55}{100}$                       c) 0.55                      d) 0.055

24)  $1\frac{1}{4} = \dots\dots\dots \%$

- a) 25                      b) 125                      c) 75                      d) 175

25) The opposite figure ,The percentage of the shaded part to whole = .....



- a) 0.4                      b) 40                      c) 4                      d) 60

26)  $1 - 25\% = \dots\dots\dots$

- a)  $\frac{3}{4}$                       b)  $\frac{1}{4}$                       c)  $\frac{3}{8}$                       d)  $\frac{1}{8}$

27) If the percent of boys in a school is 62% then the percent of girls is ...%

- a) 62                      b) 42                      c) 48                      d) 38

28) Marwan ate 75% of a pizza, so he ate ..... half the pizza.

- a) exactly                      b) less than                      c) more than                      d) otherwise

29) class has 24 students, 50% of them succeeded in the mathematics exam, then the number of students succeeded in the mathematics exam is .....

- a) 24                      b) 12                      c) 18                      d) 6



30) From the opposite table ,  
the value of unknown = .....

Whole	Part	Percent
Unknown	120	40 %

- a) 30                      b) 120                      c) 480                      d) 300

31) If the price of a watch is 350 L.E. , then 1% of its price is .....

- a) 3.5                      b) 0.35                      c) 35                      d) 0.035

32) If  $\frac{x}{5} = 20\%$ , then  $x =$  .....

- a) 2                      b) 1                      c) 4                      d) 5

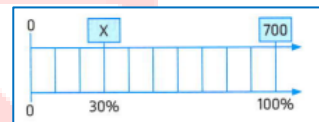
33) 40% of a number = ..... % of half of the same number.

- a) 20                      b) 10                      c) 80                      d) 100

34) If the price of a TV set is 20,000 pounds ,  
then 1% of its price = ..... pounds .

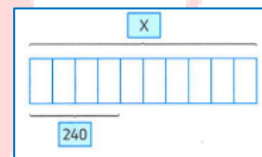
- a) 20                      b) 200                      c) 400                      d) 2000

35) From the opposite double number  
line X = .....



- a) 70                      b) 210                      c) 140                      d) 420

36) From the opposite diagram  
X = .....



- a) 600                      b) 400                      c) 240                      d) 2400

37) 25% of 1000 = 50% of .....

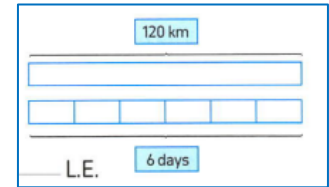
- a) 2000                      b) 1500                      c) 1250                      d) 500

## Q2 / Complete the following :-

- 1) From the opposite double number line , the unit rate is .....



- 2) The unit rate from the opposite tape diagram is .....



- 3) ..... gm = 30 kg

- 4) 1,500 kg = ..... gm.

- 5) 2.5 hr = ..... min.

- 6) 60 meters per min = ..... meter(s) per sec.

- 7) 54 L.E. for 9 kg , then the cost of 6 kg is .....

- 8) 48 km per hr = ..... meter per min

- 9) 120 km per hour = ..... meter per min.

- 10) The percentage is a ratio .....

- 11)  $36\% + 24\% - 17\% = \dots\dots\dots$

- 12)  $12\% - 4\% = \dots\dots\dots$

- 13)  $1 - (39\% + 0.21) = \dots\dots\dots \%$

- 14)  $1 - \frac{3}{4} = \dots\dots\dots \%$

- 15)  $\frac{7}{3} \times \frac{3}{7} = \dots\dots\dots \%$

- 16)  $15\% - 0.15 = \dots\dots\dots$

- 17)  $225\% - 1\frac{1}{4} = \dots\dots\dots$

- 18)  $0.35 + \frac{9}{20} = \dots\dots\dots \%$

- 19)  $15\% + 0.35 + \frac{1}{2} = \dots\dots\dots \%$

- 20)  $35\% \div \frac{7}{20} = \dots\dots\dots \%$

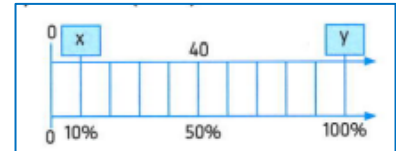
- 21) If the ratio 3:4 is equivalent to  $\frac{9}{x-1}$  then  $x = \dots\dots\dots$

- 22) 10 % of 50 kg = ..... gm

- 23) A store offers a discount 10% off on a shirt of price 300 L.E. ,then the discount = ..... L.E.



- 24)  $32\% = 1 - \dots\dots\dots \%$
- 25) If the price of a ball is 120 L.E. then 10% of its price is  $\dots\dots\dots$  L.E.
- 26)  $25\% \text{ of } 1,000 = 50\% \text{ of } \dots\dots\dots$
- 27) From the opposite double number line , the value of  $x + y = \dots\dots\dots$
- 28)  $15\% \text{ of } 240 \text{ kg} = \dots\dots\dots \text{ kg}$
- 29)  $2 \text{ to } 5 = \dots\dots\dots \%$
- 30)  $\dots\dots\dots \% \text{ of } 600 \text{ L.E.} = 120 \text{ L.E.}$
- 31)  $20\% \text{ of a number} = \dots\dots\dots \% \text{ of half of the same number.}$
- 32)  $45\% \text{ of a kilometer} = \dots\dots\dots \text{ m}$



### Q3 / Answer the following :-

- 1) Which is the longest 1.34 m or 200 cm ?
- 2) Eman covered  $\frac{3}{4}$  km in 6 min. What is the distance covered in 2 min ?
- 3) Is (490 pounds per 7 kg of apples) a unit rate or not?
- 4) Two machines produce cloth ,the first one produces 365 meters in 5 hours and the second produces 480 meters in 6 hours. Which machine is better ?
- 5) On most summer days, camels drink about 20,000 milliliters of water. How many liters of water is that ? Show your calculations
- 6) Assuming you stored 30 boxes of goods, which is 50% of the boxes, what is the total number of boxes?
- 7) Youssef bought a car for 70,000 pounds , he paid 25% of its price. How much money did he pay ?

- 8) The price of a mobile phone before a discount is 3,000 pounds. if the discount is 10 %, What is its price after the discount ?
- 9) If a man deposited 20,000 pounds in a bank with interest 20% per year. Find the total amount which he gets at the end of one year.
- 10) On the sale a shop offers a discount 20% if the price of an article is 1,600 pounds. Find its price after discount
- 11) A piece of cloth of 10 meters long , was put in water. it shrunk by 4% What is the length after shrinking ?
- 12) 20% of the students in a class are wearing black There are 40 students in the class. How many students are wearing black ?
- 13) 60 Children from school went to a trip and this is 40% of all children in the school. How many all children in the school ?
- 14) Assuming you stored 20 boxes of goods, which is 80% of the boxes, what is the total number of boxes?

15) Select 10% and then use it as a reference percentage to find the following percentages: 30% of 900 pounds?

16) A shirt that costs 1200 EGP has a 40% discount, calculate the value of the amount saved and the price of the shirt after the discount?

17) Find the value of X

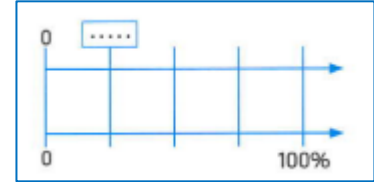
a)  $\frac{x}{8} = \frac{10}{20}$

b)  $\frac{x+1}{10} = 30\%$

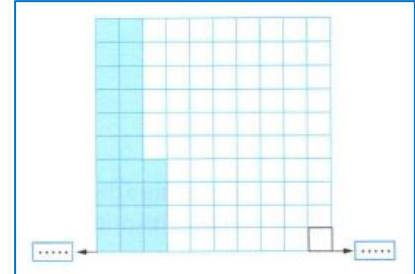
c)  $\frac{2}{x+8} = 5\%$

18) Find the value of each of the following by using the given model .

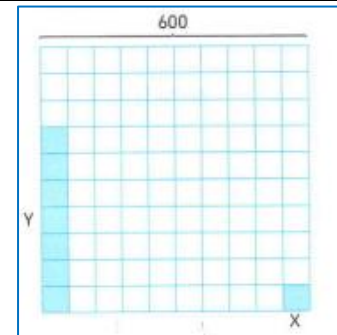
a) 25% of 80



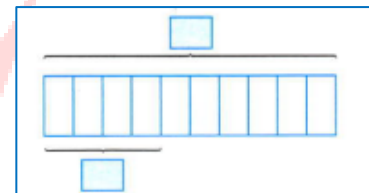
b) 24% of a number is 72



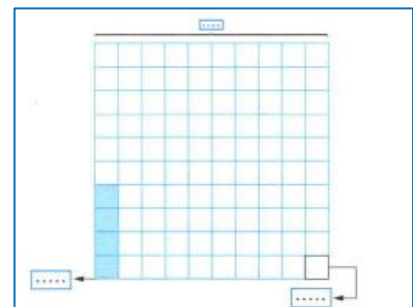
19) From the opposite 10 × 10 grid , Find: X + Y



20) If 40% of a number is 140 find , that number by using the opposite tape diagram .



21) Find the value of 4% of 200 by using the opposite 10 × 10 grid.



- 22) We ate 5 out of 10 bananas.  
What percentage of the bananas did we eat? Determine the part, whole, and percentage of this question:

The total	The part	Percentage
.....	.....	.....

- 23) 300 out of the total number of students in the school have pets, which is 25% of the total number of students in the school, how many students are in the school? From this question, Write the values that represent the part, the whole, and the percentage.

The total	The part	Percentage
.....	.....	.....

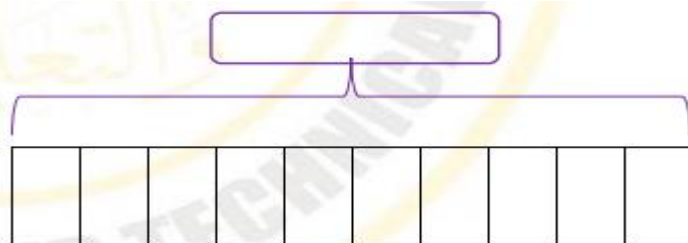
- 24) Use the double number line to determine the percentage of time Farida spent practicing swimming on Monday.

Walid's exercise schedule	
	Swimming (minutes)
Weekly exercise	70
Exercise on Mondays	21



- 25) Use the tape diagram to determine the percentage of time Izz spent practicing swimming on Sunday.

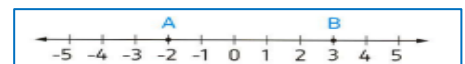
Izz's exercise schedule	
	Swimming (minutes)
Weekly exercise	60
Exercise on Sundays	12



# Unit 11

## Q1 / Choose the correct answer :-

- 1) point both of whose coordinates are negative will Lie in .....  
 a) 1<sup>st</sup> quadrant      b) 2<sup>nd</sup> quadrant      c) 3<sup>rd</sup> quadrant      d) 4<sup>th</sup> quadrant
- 2) If the y-coordinate of a point is zero, then this point always lies .....  
 a) 1<sup>st</sup> quadrant      b) 2<sup>nd</sup> quadrant      c) on Y-axis      d) on X-axis
- 3) point ( 0 , -7 ) lie on .....  
 a) 1<sup>st</sup> quadrant      b) 4<sup>th</sup> quadrant      c) on Y-axis      d) on X-axis
- 4) point ( -3 , 4 ) lie on .....  
 a) 1<sup>st</sup> quadrant      b) 2<sup>nd</sup> quadrant      c) 3<sup>rd</sup> quadrant      d) 4<sup>th</sup> quadrant
- 5) If the x-coordinate of a point is zero, then this point Lies .....  
 a) 1<sup>st</sup> quadrant      b) 2<sup>nd</sup> quadrant      c) on Y-axis      d) on X-axis
- 6) Which point lies in the third quadrant ?  
 a) ( 0 , -5 )      b) ( 5 , -11 )      c) ( -5 , 0 )      d) ( -5 , -11 )
- 7) Which of the following points lies on the y-axis ?  
 a) ( -1 , 0 )      b) ( 0 , -1 )      c) ( 5 , 0 )      d) ( 3 , 3 )
- 8) The points ( -5 , 2 ) and ( 2 , -5 ) lie in the .....  
 a) 2<sup>nd</sup> and 4<sup>th</sup> quadrants, respectively      b) Same quadrant  
 c) 2<sup>nd</sup> and 3<sup>rd</sup> quadrants, respectively      d) 4<sup>th</sup> and 3<sup>rd</sup> quadrants, respectively
- 9) The image of the point ( 2 , -5 ) by reflection across the x-axis is the point .....  
 a) ( 2 , -5 )      b) ( -2 , 5 )      c) ( 2 , 5 )      d) ( -2 , -5 )
- 10) The image of the point ( 4 , 0 ) by reflection across the y-axis is the point  
 a) ( -4 , 0 )      b) ( 0 , -4 )      c) ( 4 , 0 )      d) ( 0 , 4 )
- 11) If the point A ( - 2 , 3 ) moved 2 units to the right then 3 units downward, then A will be .....  
 a) ( -2 , 0 )      b) ( 0 , 1 )      c) ( 0 , 0 )      d) ( 1 , 1 )
- 12) The distance between a and b is .....  
 a) 1 units      b) 4 units      c) 5 units      d) 6 units





**13)** If we have the points A (5 , -5) and B (5,4), then the length of AB = .....

- a) 10 units                      b) 4 units                      c) 5 units                      d) 9 units

**14)** If the two points A (1 , 2) and B (5,4) are two vertices of a right-angled triangle ABC , then the point C could be .....

- a) ( 1 , 4 )                      b) ( 1 , 3 )                      c) ( 3 , 1 )                      d) ( 4 , 1 )

**15)** If A (1 , 3) and C (4 , 1) and  $AB \perp BC$  , then the point B is .....

- a) ( 1 , 4 )                      b) ( 1 , 1 )                      c) ( 3 , 1 )                      d) ( 4 , 2 )

**16)** The point (-2,3) lies in the .....

- a) 1<sup>st</sup> quadrant                      b) 2<sup>nd</sup> quadrant                      c) 3<sup>rd</sup> quadrant                      d) 4<sup>th</sup> quadrant

**17)** The distance between the point (2 , 3) and its image by reflection across y-axis = ..... units .

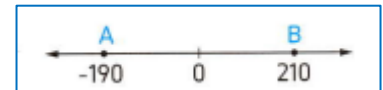
- a) 3                      b) 2                      c) 6                      d) 4

**18)** The point at the position (-1 , 3) has moved 2 units to the right and 3 units upwards then its new position is .....

- a) ( 2 , 5 )                      b) ( 0 , 5 )                      c) ( 0 , 6 )                      d) ( 1 , 6 )

**19)** In the opposite figure , the distance between the two points A and B = ..... units .

- a) 20                      b) 210                      c) 190                      d) 400



## Q2 / Complete the following :-

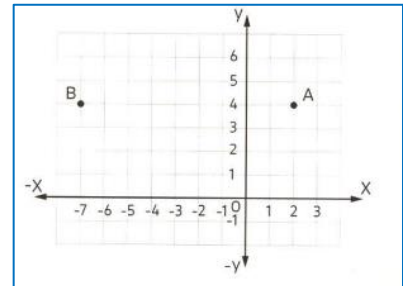
- 1) If the two points A(-2,2) and B (3,a) are on the same horizontal line in the coordinate plane, then  $a = \dots\dots\dots$
- 2) The image of the point (-4,1) by reflection in the y-axis is the point  $\dots\dots\dots$
- 3) If the point (-1,4) is the image of the point (a, b) by reflection in the y-axis, then  $a+b = \dots\dots\dots$
- 4) The distance between the point (0, -4) and the origin O =  $\dots\dots\dots$  units .
- 5) The distance between C (3, -4) and D (3, -2) is  $\dots\dots\dots$  units
- 6) The point (4,3) lies in the  $\dots\dots\dots$  quadrant
- 7) The point  $(-2\frac{1}{4}, 0)$  lies on the  $\dots\dots\dots$  -axis.
- 8) The distance between A and B is  $\dots\dots\dots$  units .
- 9) The distance between the two points (3, -4) and (3, 7) is  $\dots\dots\dots$  units .
- 10) The distance between A (2, y) and B (2, -1) is 6 units and the point A lies in first quadrant, then  $y = \dots\dots\dots$
- 11) The distance between the point (1, 2) and its image by reflection across x-axis =  $\dots\dots\dots$  units .
- 12) The point M is located 3 units to the right and 5 units up from the origin point, then the ordered pair that represents the point M is  $\dots\dots\dots$
- 13) The point (4, 2) is  $\dots\dots\dots$  units from the y-axis



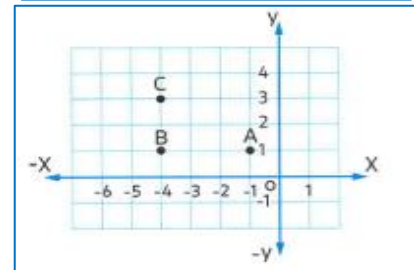
- 14) In the opposite figure: if  $AB = 30$  units, then  $X = \dots\dots\dots$



- 15) In the opposite coordinate plane ,  
the length of  $AB = \dots\dots\dots$  units.

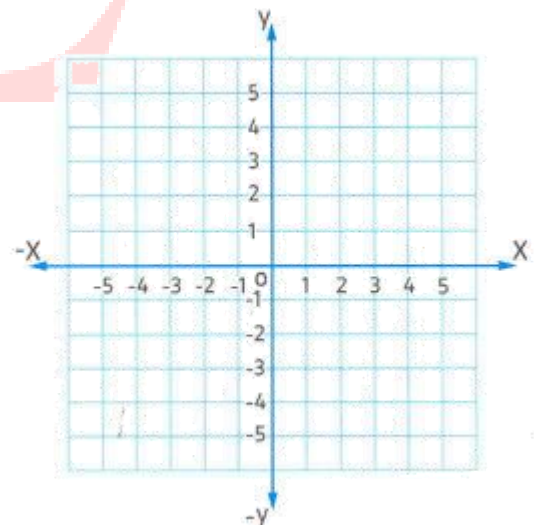


- 16) From the opposite coordinate plane ,  
if  $ABCD$  is a rectangle ,then the coordinate of  
the point  $D$  is (  $\dots\dots\dots$  ,  $\dots\dots\dots$  )



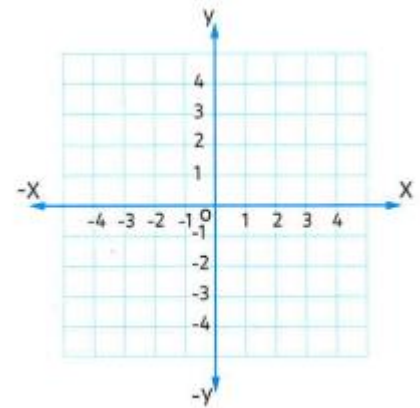
- 17) Plot the following points on the  
opposite grid :-  
 $A (3,2)$ ,  $B (-3,2)$ ,  $C (-3,-2)$  and  $D (3,-2)$

- b) Now, connect them.  
c) Identify the shape.



**18)** In the opposite figure :

Graph the points A (4,4), B (4,1) and C (1,1) join them to draw the triangle ABC and find the images of each point by reflection across the x-axis



## Answers

## Unit 10

Q1 / Choose the correct answer :-

1) Which of the following is not unit rate ?

- a) 140 L.E.weekly      b) 90 km per 60 minutes      c) 25 L.E. for each kg      d) 2 kg of flour per a cake

2) 30 LE. for 5 kg , then the cost of 30 kg is .....

- a) 5      b) 30      c) 90      d) 180

3) A car consumes  $\frac{1}{10}$  liter of petrol to cover 1 km , then it covers ..... km per liter.

- a) 1      b) 5      c) 10      d) 20

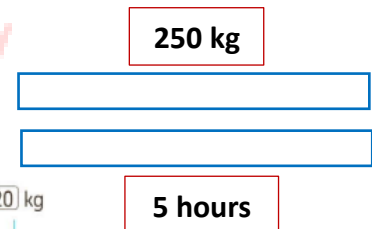
4) The missing numbers in the opposite ratio table are .....

Kg	1	2	3	4
L.E.	.....	.....	.....	200

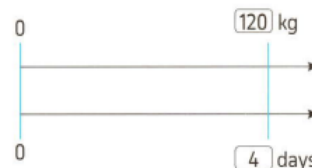
- a) 40 , 80 , 120      b) 50 , 100 , 150      c) 45 , 90 , 135      d) 60 , 120 , 180

5) The unit rate of the opposite tape diagram is .....

- a) 250 km per 5 hours      b) 50 km per hour      c) 55 km per hour      d) 100 km per 2 hours



6) By using the opposite double number line , the unit rate is .....



- a) 60 kg per day      b) 30 kg per day      c) 60 kg per 2 days      d) 100 kg per 3 days

7) Which of the following is a conversion factor?

- a)  $\frac{3km}{1h}$       b)  $\frac{60min}{1sec}$       c)  $\frac{7days}{1week}$       d)  $\frac{1km}{1000cm}$

8) Which of the following is NOT a conversion factor?

- a) 1 h = 3600 sec      b) 12 months : 1 year      c) 1000 mm = 1 liter      d)  $\frac{1min}{60sec}$



9)  $\frac{1 \text{ km}}{\dots}$  is a conversion factor ?

- a) 1 hour      b) 1000 m      c) 100 m      d) 10000mm

10)  $\frac{60 \text{ km}}{1 \text{ h}} \times \dots = \frac{60000 \text{ m}}{1 \text{ h}}$

- a)  $\frac{1 \text{ km}}{1000 \text{ m}}$       b)  $\frac{1000 \text{ km}}{1 \text{ m}}$       c)  $\frac{1 \text{ m}}{1000 \text{ km}}$       d)  $\frac{1000 \text{ m}}{1 \text{ km}}$

11) 120 m per min = ..... cm per sec

- a) 12000      b) 200      c) 720      d) 1200

12) 3.6 L  $\times$  ..... = 3600 mL

- a)  $\frac{1000 \text{ l}}{1 \text{ ml}}$       b)  $\frac{100 \text{ ml}}{1 \text{ l}}$       c)  $\frac{1000 \text{ ml}}{1 \text{ l}}$       d)  $\frac{1 \text{ l}}{1000 \text{ ml}}$

13)  $2\frac{1}{4}$  day = ..... hours .

- a) 54      b) 48      c) 2400      d) 24

14) 360 sec = .....h.

- a) 60      b) 10      c) 3600      d) 0.1

15) The conversion factor to convert the speed from m per min to km per hr is .....

- a)  $\frac{60 \text{ min}}{1 \text{ h}}$       b)  $\frac{1 \text{ km}}{1000 \text{ m}}$       c)  $\frac{1 \text{ h}}{60 \text{ min}} \times \frac{1 \text{ km}}{1000 \text{ m}}$       d)  $\frac{1 \text{ km}}{1000 \text{ m}} \times \frac{60 \text{ min}}{1 \text{ h}}$

16) 60 meters per hour = ..... meter(s) per min.

- a) 3600      b) 120      c) 360      d) 1

17)  $\frac{1 \text{ m}}{\dots}$  is NOT a conversion factor

- a) 100 cm      b) 1000 mm      c) 0.001 km      d) 60 min

18) 4.8 L  $\times$  ..... = 4800 ml

- a)  $\frac{100 \text{ ml}}{1 \text{ L}}$       b)  $\frac{1000 \text{ L}}{1 \text{ ml}}$       c)  $\frac{1000 \text{ ml}}{1 \text{ L}}$       d)  $\frac{1 \text{ l}}{1000 \text{ ml}}$

19) If the price of one kilogram of orange is 15 L.E. then the price of 4 kg

- a)  $3\frac{3}{4}$       b) 30      c) 90      d) 60



20)  $3 : 10 = \dots\dots\dots \%$

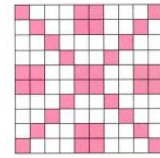
a) 30

b) 12

c) 25

d) 36

21) The opposite shaded area represents each of the following except .....



a) 36

b) 0.36

c) 36%

d)  $\frac{9}{25}$ 

22) 50% of a number = .....

a) the whole number

b) half of a number

c) third of a number

d) quarter of number

23) Which value is NOT equivalent to 55% ?

a)  $\frac{11}{20}$ b)  $\frac{55}{100}$ 

c) 0.55

d) 0.055

24)  $1\frac{1}{4} = \dots\dots\dots \%$

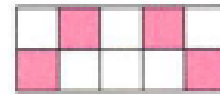
a) 25

b) 125

c) 75

d) 175

25) The opposite figure ,The percentage of the shaded part to whole = .....



a) 0.4

b) 40

c) 4

d) 60

26)  $1 - 25\% = \dots\dots\dots$

a)  $\frac{3}{4}$ b)  $\frac{1}{4}$ c)  $\frac{3}{8}$ d)  $\frac{1}{8}$ 

27) If the percent of boys in a school is 62% then the percent of girls is ...%

a) 62

b) 42

c) 48

d) 38

28) Marwan ate 75% of a pizza, so he ate ..... half the pizza.

a) exactly

b) less than

c) more than

d) otherwise

29) class has 24 students, 50% of them succeeded in the mathematics exam, then the number of students succeeded in the mathematics exam is .....

a) 24

b) 12

c) 18

d) 6





30) From the opposite table ,  
the value of unknown = .....

Whole	Part	Percent
Unknown	120	40 %

- a) 30                      b) 120                      c) 480                      d) 300

31) If the price of a watch is 350 L.E. , then 1% of its price is .....

- a) 3.5                      b) 0.35                      c) 35                      d) 0.035

32) If  $\frac{x}{5} = 20\%$ , then  $x =$  .....

- a) 2                      b) 1                      c) 4                      d) 5

33) 40% of a number = ..... % of half of the same number.

- a) 20                      b) 10                      c) 80                      d) 100

34) If the price of a TV set is 20,000 pounds ,  
then 1% of its price = ..... pounds .

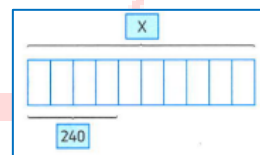
- a) 20                      b) 200                      c) 400                      d) 2000

35) From the opposite double number  
line  $X =$  .....



- a) 70                      b) 210                      c) 140                      d) 420

36) From the opposite diagram  
 $X =$  .....



- a) 600                      b) 400                      c) 240                      d) 2400

37) 25% of 1000 = 50% of .....

- a) 2000                      b) 1500                      c) 1250                      d) 500

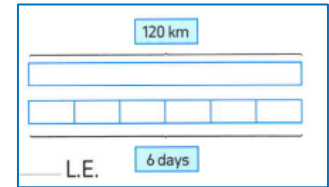


## Q2 / Complete the following :-

- 1) From the opposite double number line , the unit rate is 90 km per hour



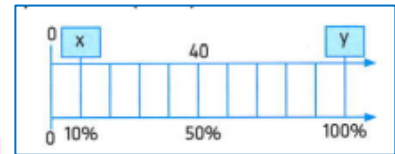
- 2) The unit rate from the opposite tape diagram is 20 km per day



- 3) 30,000 gm = 30 kg  
 4) 1,500 kg = 1,500,000 gm.  
 5) 2.5 hr = 150 min.  
 6) 60 meters per min = 1 meter(s) per sec.  
 7) 54 LE. for 9 kg , then the cost of 6 kg is 36 LE.  
 8) 48 km per hr = 800 meter per min  
 9) 120 km per hour = 2000 meter per min.  
 10) The percentage is a ratio its second term is 100.  
 11)  $36\% + 24\% - 17\% = 43\%$   
 12)  $12\% - 4\% = 8\%$   
 13)  $1 - (39\% + 0.21) = 40\%$   
 14)  $1 - \frac{3}{4} = 25\%$   
 15)  $\frac{7}{3} \times \frac{3}{7} = 100\%$   
 16)  $15\% - 0.15 = 0$   
 17)  $225\% - 1\frac{1}{4} = 100\% = 1$   
 18)  $0.35 + \frac{9}{20} = 80\%$   
 19)  $15\% + 0.35 + \frac{1}{2} = 100\%$   
 20)  $35\% \div \frac{7}{20} = 100\%$   
 21) If the ratio 3:4 is equivalent to  $\frac{9}{x-1}$  then  $x = 13$   
 22) 10 % of 50 kg = 5 gm



- 23) A store offers a discount 10% off on a shirt of price 300 LE. ,then the discount = 30 L.E.
- 24)  $32\% = 1 - 68\%$
- 25) If the price of a ball is 120 LE.then 10% of its price is 12 LE.
- 26)  $25\% \text{ of } 1,000 = 50\% \text{ of } 500$
- 27) From the opposite double number line ,  
the value of  $x + y = 88$
- 28)  $15\% \text{ of } 240 \text{ kg} = 36 \text{ kg}$
- 29)  $2 \text{ to } 5 = 40\%$
- 30)  $20\% \text{ of } 600 \text{ L.E.} = 120 \text{ L.E.}$
- 31)  $20\% \text{ of a number} = 50\% \text{ of half of the same number.}$
- 32)  $45\% \text{ of a kilometer} = 450 \text{ m}$



### Q3 / Answer the following :-

1) Which is the longest 1.34 m or 200 cm ?

200

2) Eman covered  $\frac{3}{4}$  km in 6 min. What is the distance covered in 2 min ?

$\frac{1}{4}$  km

3) Is (490 pounds per 7 kg of apples) a unit rate or not?

Not

4) Two machines produce cloth ,the first one produces 365 meters in 5 hours and the second produces 480 meters in 6 hours. Which machine is better ?

Second is better

5) On most summer days, camels drink about 20,000 milliliters of water. How many liters of water is that ? Show your calculations

20 L

6) Assuming you stored 30 boxes of goods, which is 50% of the boxes, what is the total number of boxes?

60 boxes

7) Youssef bought a car for 70,000 pounds , he paid 25% of its price. How much money did he pay ?

17500 LE.

- 8) The price of a mobile phone before a discount is 3,000 pounds. if the discount is 10 %, What is its price after the discount ?

**2700 LE.**

- 9) If a man deposited 20,000 pounds in a bank with interest 20% per year. Find the total amount which he gets at the end of one year.

**24,000 LE.**

- 10) On the sale a shop offers a discount 20% if the price of an article is 1,600 pounds. Find its price after discount.

**1,280 LE.**

- 11) A piece of cloth of 10 meters long , was put in water. it shrunk by 4% What is the length after shrinking ?

**9.6 m**

- 12) 20% of the students in a class are wearing black There are 40 students in the class. How many students are wearing black ?

**8 students**

- 13) 60 Children from school went to a trip and this is 40% of all children in the school. How many all children in the school ?

**150 children**

- 14) Assuming you stored 20 boxes of goods, which is 80% of the boxes, what is the total number of boxes?

**25 boxes**



- 15) Select 10% and then use it as a reference percentage to find the following percentages: 30% of 900 pounds?

$$10\% \times 900 = 90$$

$$90 \times 3 = 270 \text{ pounds.}$$

- 16) A shirt that costs 1200 EGP has a 40% discount, calculate the value of the amount saved and the price of the shirt after the discount?

$$\text{Discount (saved money)} = 40\% \times 1200 = 480 \text{ pounds.}$$

$$\text{Price after} = 1200 - 480 = 720 \text{ pounds.}$$

- 17) Find the value of X

a)  $\frac{x}{8} = \frac{10}{20}$   
 $x = 4$

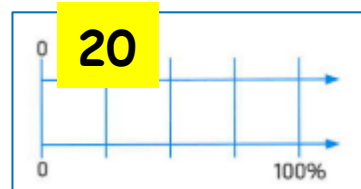
b)  $\frac{x+1}{10} = 30\%$   
 $x = 2$

c)  $\frac{2}{x+8} = 5\%$   
 $x = 32$

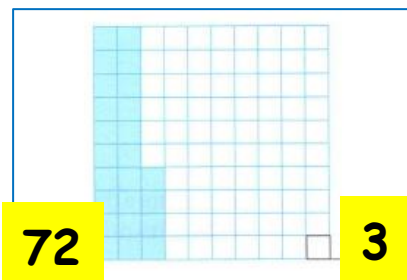


18) Find the value of each of the following by using the given model .

a) 25% of 80 = 20

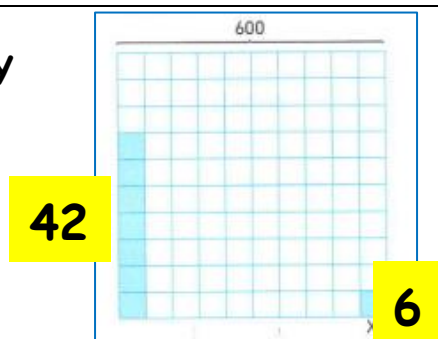


b) 24% of a number is 72 , number = 300

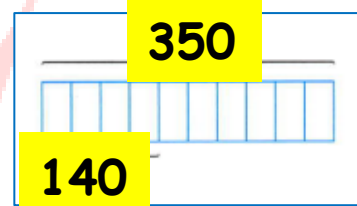


19) From the opposite 10 x 10 grid , Find: X + Y

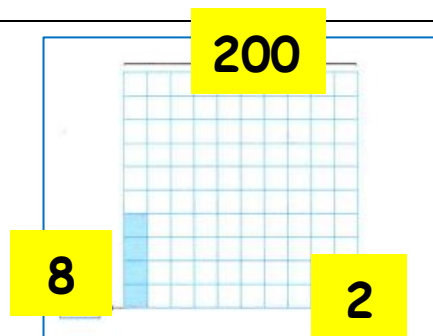
42 + 6 = 48



20) If 40% of a number is 140 find ,  
that number by using the opposite tape  
diagram . number is 350



21) Find the value of 4% of 200 by using the  
opposite 10 x 10 grid. = 8





- 22) We ate 5 out of 10 bananas.  
What percentage of the bananas did we eat? Determine the part, whole, and percentage of this question.

The total	The part	Percentage
10	5	50%

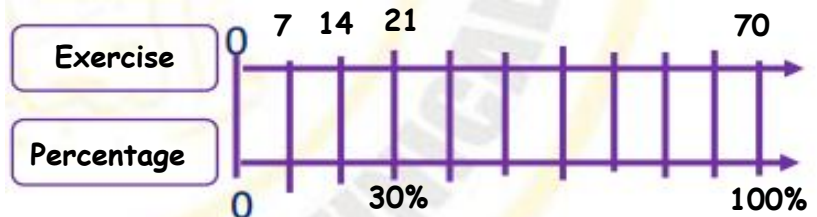
- 23) 300 out of the total number of students in the school have pets, which is 25% of the total number of students in the school, how many students are in the school? From this question, Write the values that represent the part, the whole, and the percentage.

The total	The part	Percentage
1200	300	25%

- 24) Use the double number line to determine the percentage of time Farida spent practicing swimming on Monday.

Percentage = 30%

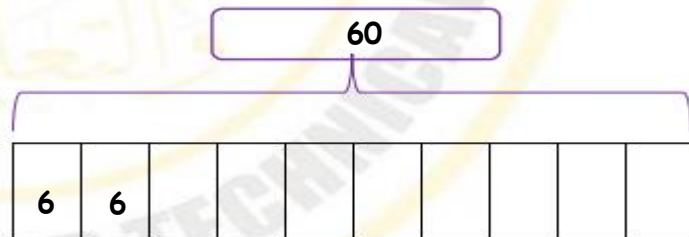
Walid's exercise schedule	
	Swimming (minutes)
Weekly exercise	70
Exercise on Mondays	21



- 25) Use the tape diagram to determine the percentage of time Izz spent practicing swimming on Sunday.

Percentage = 20%

Izz's exercise schedule	
	Swimming (minutes)
Weekly exercise	60
Exercise on Sundays	12



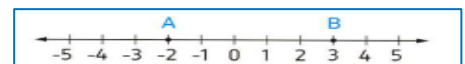
12 out of 60  
= 20%

## Answers

## Unit 11

***Q1 / Choose the correct answer :-***

- 1) Point both of whose coordinates are negative will Lie in .....
- a) 1<sup>st</sup> quadrant      b) 2<sup>nd</sup> quadrant      c) 3<sup>rd</sup> quadrant      d) 4<sup>th</sup> quadrant
- 2) If the y-coordinate of a point is zero, then this point always lies .....
- a) 1<sup>st</sup> quadrant      b) 2<sup>nd</sup> quadrant      c) on Y-axis      d) on X-axis
- 3) Point ( 0 , -7 ) lie on .....
- a) 1<sup>st</sup> quadrant      b) 4<sup>th</sup> quadrant      c) on Y-axis      d) on X-axis
- 4) Point ( -3 , 4 ) lie on .....
- a) 1<sup>st</sup> quadrant      b) 2<sup>nd</sup> quadrant      c) 3<sup>rd</sup> quadrant      d) 4<sup>th</sup> quadrant
- 5) If the x-coordinate of a point is zero, then this point Lies .....
- a) 1<sup>st</sup> quadrant      b) 2<sup>nd</sup> quadrant      c) on Y-axis      d) on X-axis
- 6) Which point lies in the third quadrant ?
- a) ( 0 , -5 )      b) ( 5 , -11 )      c) ( -5 , 0 )      d) ( -5 , -11 )
- 7) Which of the following points lies on the y-axis ?
- a) ( -1 , 0 )      b) ( 0 , -1 )      c) ( 5 , 0 )      d) ( 3 , 3 )
- 8) The points ( -5 , 2 ) and ( 2 , -5 ) lie in the .....
- a) 2<sup>nd</sup> and 4<sup>th</sup> quadrants, respectively      b) Same quadrant
- c) 2<sup>nd</sup> and 3<sup>rd</sup> quadrants, respectively      d) 4<sup>th</sup> and 3<sup>rd</sup> quadrants, respectively
- 9) The image of the point ( 2 , -5 ) by reflection across the x-axis is the point .....
- a) ( 2 , -5 )      b) ( -2 , 5 )      c) ( 2 , 5 )      d) ( -2 , -5 )
- 10) The image of the point ( 4 , 0 ) by reflection across the y-axis is the point
- a) ( -4 , 0 )      b) ( 0 , -4 )      c) ( 4 , 0 )      d) ( 0 , 4 )
- 11) If the point A ( - 2 , 3 ) moved 2 units to the right then 3 units downward, then A will be .....
- a) ( -2 , 0 )      b) ( 0 , 1 )      c) ( 0 , 0 )      d) ( 1 , 1 )
- 12) The distance between a and b is .....
- a) 1 units      b) 4 units      c) 5 units      d) 6 units



13) If we have the points A (5 , -5) and B (5,4), then the length of AB = .....

- a) 10 units      b) 4 units      c) 5 units      d) 9 units

14) If the two points A (1 , 2) and B (5,4) are two vertices of a right-angled triangle ABC , then the point C could be .....

- a) { 1 , 4 }      b) ( 1 , 3 )      c) ( 3 , 1 )      d) ( 4 , 1 )

15) If A (1 , 3) and C (4 , 1) and  $AB \perp BC$  , then the point B is .....

- a) ( 1 , 4 )      b) { 1 , 1 }      c) ( 3 , 1 )      d) ( 4 , 2 )

16) The point (-2,3) lies in the .....

- a) 1<sup>st</sup> quadrant      b) 2<sup>nd</sup> quadrant      c) 3<sup>rd</sup> quadrant      d) 4<sup>th</sup> quadrant

17) The distance between the point (2 , 3) and its image by reflection across y-axis = ..... units .

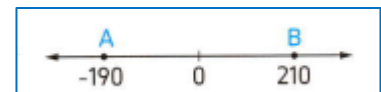
- a) 3      b) 2      c) 6      d) 4

18) The point at the position (-1 , 3) has moved 2 units to the right and 3 units upwards then its new position is .....

- a) ( 2 , 5 )      b) ( 0 , 5 )      c) ( 0 , 6 )      d) { 1 , 6 }

19) In the opposite figure , the distance between the two points A and B = ..... units .

- a) 20      b) 210      c) 190      d) 400



## Q2 / Complete the following :-

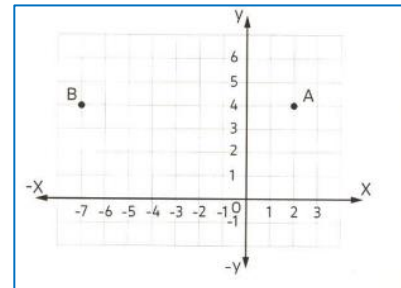
- 1) If the two points A(-2,2) and B (3,a) are on the same horizontal line in the coordinate plane, then  $a = 2$
- 2) The image of the point (-4,1) by reflection in the Y-axis is the point (4,1)
- 3) If the point (-1, 4) is the image of the point (a, b) by reflection in the Y-axis, then  $a+b = 5$
- 4) The distance between the point (0, -4) and the origin  $O = 4$  units .
- 5) The distance between C (3, -4) and D (3, -2) is 2 units
- 6) The point (4,3) lies in the first quadrant
- 7) The point  $(-2\frac{1}{4}, 0)$  lies on the X-axis.
- 8) In the opposite figure The distance between A and B is 9 units .
- 9) The distance between the two points (3, -4) and (3, 7) is 11 units .
- 10) The distance between A (2, y) and B (2, -1) is 6 units and the point A lies in first quadrant, then  $y = 5$
- 11) The distance between the point (1, 2) and its image by reflection across X-axis = 4 units .
- 12) The point M is located 3 units to the right and 5 units up from the origin point, then the ordered pair that represents the point M is (3,5)
- 13) The point (4, 2) is 2 units from the y-axis



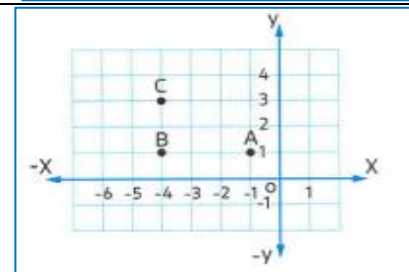
14) In the opposite figure: if  $AB = 30$  units, then  $X = 19.5$



15) In the opposite coordinate plane ,  
the length of  $AB = 9$  units.



16) From the opposite coordinate plane ,  
if  $ABCD$  is a rectangle ,then the coordinate of  
the point  $D$  is  $(-1, 3)$

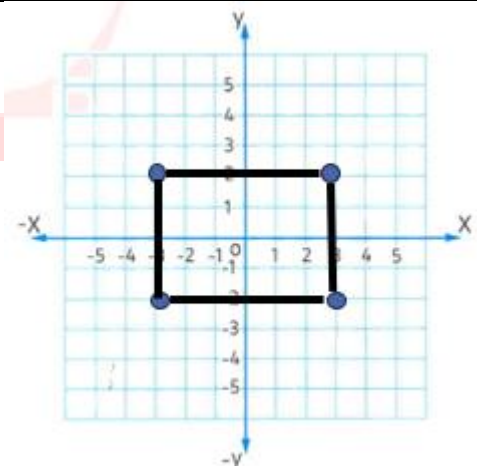


17) Plot the following points on the opposite  
grid :-

$A(3, 2)$ ,  $B(-3, 2)$ ,  $C(-3, -2)$  and  $D(3, -2)$

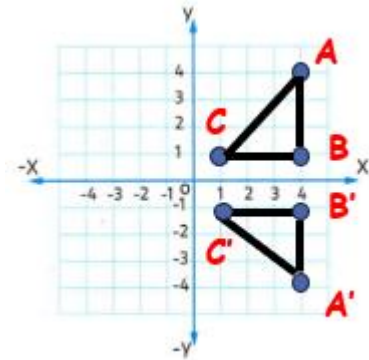
b) Now, connect them.

c) Identify the shape. **rectangle**



**18)** In the opposite figure :

Graph the points A (4,4), B (4,1) and C (1,1) join them to draw the triangle ABC and find the images of each point by reflection across the X-axis



حمل الآن

مجاناً وحصرياً

# المراجعة رقم (4)

## اختبار شهر مارس





#### 01: CHOOSE THE CORRECT ANSWER

1 Murad spends 24 pounds in 6 days, then he will spend ..... LE in 10 days.

- (a) 240 (b) 60 (c) 40 (d) 30

2 45 L.E for 5kg of tomatos, then the cost of 20 kg of tomatos is ..... L.E

- (a) 45 (b) 90 (c) 180 (d) 200

3 120 m per min = ..... cm per sec

- (a) 12000 (b) 200 (c) 720 (d) 1200

4 1 day: 24 hours is considered a/an .....

- (a) unit ratio (b) equivalent ratio (c) conversion factor (d) otherwise

5 180 minutes = ..... hours

- (a) 2 (b) 3 (c) 4 (d) 5

6 360 sec = ..... hour

- (a) 60 (b) 10 (c) 3600 (d) 0.1

7 2.3 pounds = ..... piasters

- (a) 2300 (b) 230 (c) 23 (d) 2.3

8 5,200 dm = ..... km

- (a) 52 (b) 5.2 (c) 0.52 (d) 0.052

9  $4.8 \text{ L} \times \frac{\text{.....}}{\text{.....}} = 4800 \text{ mL}$

- (a)  $\frac{100 \text{ mL}}{1 \text{ L}}$  (b)  $\frac{1,000 \text{ mL}}{1 \text{ L}}$   
 (c)  $\frac{1,000 \text{ L}}{1 \text{ mL}}$  (d)  $\frac{1 \text{ L}}{1,000 \text{ mL}}$



FOLLOW US

- 10** If the original price of a dress is 1,700 LE, then its sale price after apply a discount 20% is .....
- (a) 1360 (b) 340 (c) 170 (d) 17
- 11** 20% of a number = ..... % of half the same number
- (a) 10 (b) 20 (c) 30 (d) 40
- 12**  $1 - 1\% = \dots\dots\dots \%$
- (a) zero (b) 2 (c) 99 (d) 1
- 13** The percentage of 4 squares of 400 squares is ..... %.
- (a) 4 (b) 1 (c) 0.01 (d) 0.1
- 14**  $280 \text{ cm / sec} = \dots\dots\dots \text{ m/min}$
- (a) 140 (b) 168 (c) 280 (d) 28
- 15**  $1 - 75\% = \dots\dots\dots$
- (a) 74% (b) 0.25 (c) 25 (d) 2.5
- 16**  $225\% = \dots\dots\dots$
- (a)  $1 \frac{25}{100}$  (b)  $2 \frac{25}{200}$  (c)  $2 \frac{1}{4}$  (d) 0.225
- 17** If the percentage of success in a school is 76 %, so the percentage of failures is ..... %
- (a) 24 (b) 44 (c) 67 (d) 90
- 18** Mazen studies 21 pages in 6 hours, then the unit rate of his study is ..... pages/hour.
- (a) 5 (b) 4 (c) 3.5 (d) 5.5
- 19** 40% of a number equals.....
- (a) its fourth (b) its four tenths  
(c) its four fourths (d) its four sevenths



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20 ..... gm = 60 kg

(a) 0.06

(b) 6,000

(c) 600

(d) 60,000

21 49 % = .....

(a)  $\frac{4.9}{100}$

(b) 49

(c) 0.49

(d) 4900

22 35% of 160 = .....

(a)  $\frac{56}{100}$

(b) 56

(c) 5.6

(d) 560

23 5% of ..... = 5

(a) 25

(b) 50

(c) 100

(d) 125

24 Farida ate 45 % of a pizza, so she ate ..... half the pizza.

(a) exactly

(b) more than

(c) less than

(d) otherwise

25 45 % of a litre = ..... mL

(a) 450

(b) 4500

(c) 45

(d) 0.45

26 5% of ..... LE = 120 LE

(a) 240

(b) 2400

(c) 1200

(d) 120

27  $\frac{3}{6} = \dots\dots\%$

(a) 30

(b) 25

(c) 50

(d) 60

28 If 100% of a number is 80, what is 50% of this number?

(a) 0.4

(b) 4

(c) 40

(d) 400

29 Which of the following is a unit rate ?

(a) 40 LE per 2 kg

(b) 450 km per 3 hours

(c) 4 spoons of sugar per 2 cups

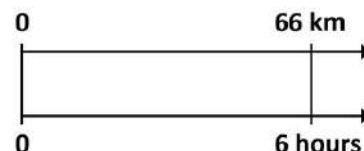
(d) 2 liters per bottle



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## Q2: COMPLETE THE FOLLOWING

- 1 A motorcycle covers 160 km in 4 hours, then the rate of speed is ..... km/hr.
- 2 A rabbit jumps 3 leaps in 1 meter, then it will jump ..... leaps in 15 meters.
- 3 A factory produces 1,800 cans of soda every 6 hours, then in 15 hours it will produce ..... cans of soda.
- 4 If there are 81 litres of water in 18 bottles, then there ..... litres in 6 bottles
- 5 71,500 cm = ..... km
- 6  $\frac{23}{25} = \dots\dots\dots \%$
- 7 There are 60 students in a class. If the percentage of girls is 40%, then the number of boys is .....
- 8 If 10% of a number is 36, then the number is .....
- 9  $2.15 = \dots\dots\dots \%$
- 10 If there are 50 students in class and 96% of them passed, then the students who failed the test are ..... students.
- 11 24 cm per second = ..... = ..... meter/minute
- 12 45 m/min = ..... = ..... km/hr
- 13 Belal scored 570 marks out of 600. Then the percentage of marks scored is .....
- 14 A laptop that costs 24,500 LE is 20% off. What is the sale price?
- 15 By using the opposite double number line the unit rate is .....



FOLLOW US



### Q3: ANSWER THE FOLLOWING

- 1 Adam spent 75% of his workout time running. Express the percentage as a fraction and a decimal fraction?  
 .....
- 2 A piece of cloth, 20 meters long, was put in water, it shrank by 4%. What is the length after shrinking?  
 .....
- 3 If the price of jeans is 720 L.E, if there's 35% percent off, Calculate the price of two jeans.  
 .....
- 4 If the original price of a meal is 460 LE, if there's a tax of 15%, Calculate the price of the meal after adding tax  
 .....
- 5 Convert the speed of 500 cm/s to meters per second using the conversion factor?  
 .....
- 6 Ahmed drove 240 km in 2 hours.  
 Draw a tape diagram to represent the rate.  
 (a) Find the rate of speed at which Ahmed drives.  
 (b) How many kilometers do Ahmed cover when he drive for 7 hours?  
 .....  
 .....
- 7 Select 10% and then use it as a reference ratio to find the following percentages: 60% of 150 L.E = .....
- 8 If the lunch bill for you and your friend is EGP 300 and the sales tax rate is 5% and a 10% service charge is added. Calculate the total amount of lunch?  
 .....




**FOLLOW US**

- 9** We ate 5 out of 10 bananas. What percentage of the bananas did we eat? Determine the part, whole, and percentage of this question:

.....  
 .....

Total	Part	Percentage
.....	.....	.....

- 10** A shoe that costs EGP 1,400 has a 20% discount, calculate the value of the amount saved and the price of the shoe after the discount?

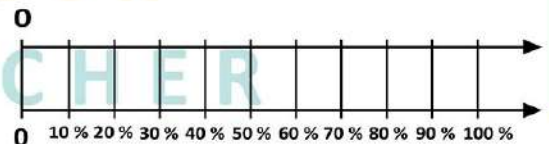
.....  
 .....

- 11** Assuming you stored 20 boxes of goods, which is 80% of the boxes, What is the total number of boxes?

.....  
 .....

- 12** If there are 40% of math books in a school library containing 1,800 books in total, Find the number of math books in the library.

.....  
 .....



- 13** If the percentage of students who succeeded in the science exam is 87%, Find percentage of students who failed

.....

- 14** A car travels 240 kilometres using 8 liters of gasoline, determine the unit rate with which strategy you prefer?

.....

- 15** A train is traveling at 0.75 kilometers per minute. What is its speed in kilometers per hour?

.....



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**01: CHOOSE THE CORRECT ANSWER**

- 1 Which of the following lies in the 2<sup>nd</sup> quadrant?  
 (a) (2, 7)      (b) (5, -3)      (c) (-5, -9)      (d) (-1, 5)
- 2 The point ..... lies on the x-axis.  
 (a) (0, 3)      (b) (-1, -4)      (c) (-5, 0)      (d) (0, -5)
- 3 The distance between the point (0, -4) and the origin point is ..... units  
 (a) 0      (b) -4      (c) 4      (d) 8
- 4 If the point (x, -4) lies in the 3rd quadrant, then the value of x is .....  
 (a) 7      (b) -1      (c) 2      (d) 5
- 5 The image of the point (4, -3) by reflection on x-axis is .....  
 (a) (4, -3)      (b) (-4, -3)      (c) (4, 3)      (d) (-4, 3)
- 6 If the point (x, 6) lies in the 1st quadrant, then the value of x is .....  
 (a) -7      (b) -1      (c) -2      (d) 5
- 7 The point (-8, 3) lies in .....  
 (a) 1<sup>st</sup> quadrant      (b) 2<sup>nd</sup> quadrant      (c) 3<sup>rd</sup> quadrant      (d) 4<sup>th</sup> quadrant
- 8 The image of the point (0, 7) by reflection on the y-axis is .....  
 (a) (0, -7)      (b) (0, 0)      (c) (7, 0)      (d) itself
- 9 If the point A (-3, 5) moved 1 unit to the right then 2 units downward, then A will be .....  
 (a) (-4, 7)      (b) (-2, 3)  
 (c) (-2, -3)      (d) (2, -3)



**FOLLOW US**



- 10** If the image of a point by reflection on the y-axis is  $(-3, 4)$ , then the point is .....
- ☐ a  $(4, -3)$       ☐ b  $(3, 4)$       ☐ c  $(-3, -4)$       ☐ d  $(-4, 3)$
- 11** The distance between the points A  $(5, -5)$  and B  $(5, 4)$  is ..... units.
- ☐ a 0      ☐ b 1      ☐ c 9      ☐ d 10
- 12** The point ..... lies on the y-axis.
- ☐ a  $(0, 3)$       ☐ b  $(-1, -4)$       ☐ c  $(-5, 0)$       ☐ d  $(5, -5)$
- 13** What is the distance between the two points  $(4, -7)$  and  $(-5, -7)$ ?
- ☐ a 1 unit      ☐ b 3 units      ☐ c 7 units      ☐ d 9 units
- 14** Which point of the following can be vertex of right angled-triangle If another vertices are  $(0, 3)$  and  $(5, 0)$ ?
- ☐ a  $(0, 3)$       ☐ b  $(0, 5)$       ☐ c  $(3, 5)$       ☐ d  $(0, 0)$
- 15** The distance between  $-6$  and  $5$  on the number line is ..... units
- ☐ a 1      ☐ b  $-1$       ☐ c 11      ☐ d 5
- 16** If the x-coordinate of a point is zero, then th is point lies .....
- ☐ a in 1<sup>st</sup> quadrant      ☐ b in 3<sup>rd</sup> quadrant      ☐ c on x-axis      ☐ d on y-axis
- 17** If the y-coordinate of a point is zero, then th is point lies .....
- ☐ a in 1<sup>st</sup> quadrant      ☐ b in 3<sup>rd</sup> quadrant      ☐ c on x-axis      ☐ d on y-axis
- 18** The greater the value of the x-coordinate, ..... the point is to the y-axis
- ☐ a farther      ☐ b closer      ☐ c equal      ☐ d otherwise
- 19** Point C  $(-5, -3)$  lies on the ..... quadrant.
- ☐ a first      ☐ b third  
☐ c second      ☐ d fourth



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## Q2: COMPLETE THE FOLLOWING

- 1 The distance between A (3 , 4) and x-axis is ..... units.
- 2 The distance between X(- 4 , 5) and Y( -4 , -5) is ..... units.
- 3 The point (-9 , -2) lies on the ..... quadrant.
- 4 The coordinate plane is separated into ..... quadrants.
- 5 The image of point ( 7 , -2) by reflection on ..... is (-7 , -2).
- 6 The image of the point (0 , -1) by reflection on the y-axis is ..... .
- 7 Point C (0 , 3) lies on .....-axis.
- 8 The image of the point ( 4 , 3) by reflection on ..... is ( 4 , -3).
- 9 The x-coordinate of any point that lies on the y-axis is ..... .
- 10 The y-coordinate of any point that lies on the x-axis is ..... .
- 11 The point (4 , 7) by reflection across the x-axis is the point .....
- 12 The point C (a , 5) lies on the y-axis, then a = .....
- 13 The smaller the absolute value of the y-coordinate, ..... the point is to the x-axis.



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### Q3: ANSWER THE FOLLOWING

1 Determine which quadrant you can plot the ordered pair in:

- a  $(2, 5) \rightarrow$  .....      b  $(-1, 2) \rightarrow$  .....      c  $(1, -5) \rightarrow$  .....  
d  $(4, -3) \rightarrow$  .....      e  $(-7, -1) \rightarrow$  .....      f  $(5, 5) \rightarrow$  .....

Points D and K are images of each other by reflection across the y-axis.

Give the coordinates of point K if the coordinates of point D are the following:

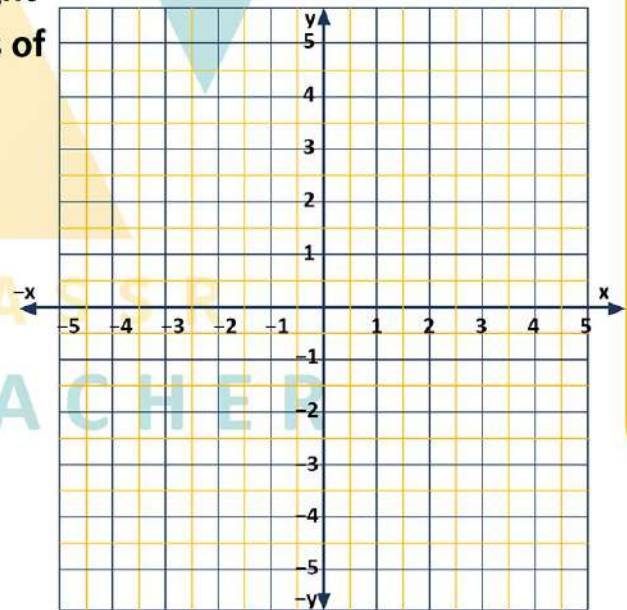
- a  $(8, 1) \rightarrow$  .....      b  $(-1, 1) \rightarrow$  .....      c  $(-1, -5) \rightarrow$  .....  
d  $(0, -5) \rightarrow$  .....      e  $(4, -4) \rightarrow$  .....      f  $(-7, 0) \rightarrow$  .....

2 By using paper graph: Plot the points  $(-3, 3)$ ,  $(3, -1)$ , and  $(-3, -1)$  and connect them. Does this figure form a right triangle? If yes, what are the coordinates of the vertex of the right angle?

.....  
.....

3 The point  $(-4, -3)$  is a vertex of a rectangle with sides 2 units wide and 3 units long. Determine another 3 points to complete the rectangles.

.....  
.....  
.....



اللهم اجعل هذا العمل خالصا لوجهك الكريم واكتب له القبول  
والنفع يا كريم يا وهَّاب.



FOLLOW US

#### Q1: CHOOSE THE CORRECT ANSWER

- 1 Murad spends 24 pounds in 6 days, then he will spend ..... LE in 10 days.   
 a 240 b 60 c 40 d 30   
*Handwritten: 4 L.E./day*
- 2 45 L.E for 5kg of tomatos, then the cost of 20 kg of tomatos is ..... L.E   
 a 45 b 90 c 180 d 200   
*Handwritten: 9 L.E*
- 3 120 m per min = ..... cm per sec   
 a 12000 b 200 c 720 d 1200   
*Handwritten:  $\frac{120 \text{ m}}{\text{min}} \times \frac{100 \text{ cm}}{1 \text{ m}} \times \frac{1 \text{ min}}{60 \text{ sec}} = \frac{120 \times 100}{60} = 200$*
- 4 1 day: 24 hours is considered a/an .....   
 a unit ratio b equivalent ratio c conversion factor d otherwise   
*Handwritten: 1 day / 24 hours*
- 5 180 minutes = ..... hours   
 a 2 b 3 c 4 d 5   
*Handwritten:  $\frac{180 \text{ min}}{1} \times \frac{1 \text{ hr}}{60 \text{ min}} = \frac{180}{60} = 3$*
- 6 360 sec = ..... hour   
 a 60 b 10 c 3600 d 0.1   
*Handwritten:  $\frac{360}{3600} = \frac{1}{10}$*
- 7 2.3 pounds = ..... piasters   
 a 2300 b 230 c 23 d 2.3   
*Handwritten: 230*
- 8 5,200 dm = ..... km   
 a 52 b 5.2 c 0.52 d 0.052   
*Handwritten:  $\frac{5200}{10000} = 0.52$*
- 9 4.8 L x ..... = 4800 mL   
 a  $\frac{100 \text{ mL}}{1 \text{ L}}$  b  $\frac{1,000 \text{ mL}}{1 \text{ L}}$  c  $\frac{1,000 \text{ L}}{1 \text{ mL}}$  d  $\frac{1,000 \text{ mL}}{1,000 \text{ mL}}$    
*Handwritten:  $\frac{1,000 \text{ mL}}{1 \text{ L}}$*



FOLLOW US





AHMED NASSR

# MARCH REVISION 2025 - SECOND TERM

## GRADE 6 - UNIT (10)

$$10\% \text{ of } 1700 = 170 \times 2$$

$$20\% = 340 \text{ L.E.}$$

$$1700 - 340 = 1360$$

- 10 If the original price of a dress is 1,700 LE, then its sale price after apply a discount 20% is .....

(a) 1360

(b) 340

(c) 170

(d) 17

$$20 = \frac{2}{10} \times 100 = 20\% \text{ of } 50$$

$$\frac{20}{100} \times 100 = 20$$

- 11 20% of a number = ..... % of half the same number

(a) 10

(b) 20

(c) 30

(d) 40

- 12  $1 - 1\% = \dots\dots\dots\%$

(a) zero

(b) 2

(c) 99

(d) 1

- 13 The percentage of 4 squares of 400 squares is ..... %

(a) 4

(b) 1

(c) 0.01

(d) 0.1

- 14  $280 \text{ cm} / \text{sec} = \dots\dots\dots \text{m/min}$

$$\frac{280 \text{ cm}}{\text{sec}} \times \frac{1 \text{ m}}{100 \text{ cm}} \times \frac{60 \text{ sec}}{1 \text{ min}} = \frac{280 \times 60}{100} = 168$$

(a) 140

(b) 168

(c) 280

(d) 28

- 15  $1 - 75\% = \dots\dots\dots$

$$25\% = \frac{1}{4} = 0.25$$

(a) 74%

(b) 0.25

(c) 25

(d) 2.5

- 16  $225\% = \dots\dots\dots$

$$2 \frac{25}{100} = 2 \frac{1}{4}$$

(a)  $1 \frac{25}{100}$

(b)  $2 \frac{25}{200}$

(c)  $2 \frac{1}{4}$

(d)  $0.225 \frac{2}{5}$

- 17 If the percentage of success in a school is 76 %, so the percentage of failures is .... %

(a) 24

(b) 44

(c) 67

(d) 90

- 18 Mazen studies 21 pages in 6 hours, then the unit rate of his study is ..... pages/hour.

(a) 5

(b) 4

(c) 3.5

(d) 5.5

$$\frac{21}{6} = 3 \frac{3}{6} = 3.5$$

- 19 40% of a number equals.....

$$\frac{40}{100} = \frac{4}{10} = \frac{2}{5}$$

(a) its fourth

(b) its four tenths

(c) its four fourths

(d) its four sevenths



FOLLOW US

kg = 1000

20 ..... gm = 60 kg

(a) 0.06

(b) 6,000

(c) 600

(d) 60,000

21 49 % = .....

(a)  $\frac{4.9}{100}$

(b) 49 %

(c) 0.49

(d) 4900

22 35% of 160 = .....

(a)  $\frac{56}{100}$

(b) 56

(c) 5.6

(d) 560

23 5% of ..... = 5

(a) 25

(b) 50

(c) 100

(d) 125

24 Farida ate 45 % of a pizza, so she ate ..... half the pizza.

(a) exactly

(b) more than

(c) less than

(d) otherwise

25 45 % of a litre = ..... mL

(a) 450

(b) 4500

(c) 45

(d) 0.45

26 5% of ..... LE = 120 LE

(a) 240

(b) 2400

(c) 1200

(d) 120

27  $\frac{3}{6} = \dots\dots\%$

(a) 30

(b) 25

(c) 50

(d) 60

28 If 100% of a number is 80, what is 50% of this number?

(a) 0.4

(b) 4

(c) 40

(d) 400

29 Which of the following is a unit rate ?

(a) 40 LE per 2 kg

(b) 450 km per 3 hours

(c) 4 spoons of sugar per 2 cups

(d) 2 liters per bottle



FOLLOW US



## Q2: COMPLETE THE FOLLOWING

- 1 A motorcycle covers 160 km in 4 hours, then the rate of speed is 40 km/hr.
- 2 A rabbit jumps 3 leaps in 1 meter, then it will jump 45 leaps in 15 meters.
- 3 A factory produces 1,800 cans of soda every 6 hours, then in 15 hours it will produce 4,500 cans of soda.
- 4 If there are 81 litres of water in 18 bottles, then there 27 litres in 6 bottles.
- 5 71,500 cm = 0.715 km
- 6  $\frac{23}{25} = \frac{92}{100} = 92\%$
- 7 There are 60 students in a class. If the percentage of girls is 40%, then the number of boys is 36.
- 8 If 10% of a number is 36, then the number is 360.
- 9  $2.15 = \frac{215}{100} = 215\%$
- 10 If there are 50 students in class and 96% of them passed, then the students who failed the test are 15 students.
- 11 24 cm per second =  $\frac{24 \text{ cm}}{\text{sec}} \times \frac{60 \text{ sec}}{1 \text{ min}} \times \frac{1 \text{ m}}{100 \text{ cm}} = \frac{24 \times 60}{100} = 14.4$  meter/minute
- 12 45 m/min =  $\frac{45 \text{ m}}{\text{min}} \times \frac{60 \text{ min}}{1 \text{ hr}} \times \frac{1 \text{ km}}{1000 \text{ m}} = \frac{45 \times 60}{1000} = 2.7$  km/hr
- 13 Belal scored 570 marks out of 600. Then the percentage of marks scored is 95%.
- 14 A laptop that costs 24,500 LE is 20% off. What is the sale price?  
19,600 LE
- 15 By using the opposite double number line the unit rate is 11 km/hr



FOLLOW US



### Q3: ANSWER THE FOLLOWING

- 1 Adam spent 75% of his workout time running. Express the percentage as a fraction and a decimal fraction?

$\frac{75}{100} = \frac{3}{4}$  ✓  $0.75$  ✓

- 2 A piece of cloth, 20 meters long, was put in water, it shrank by 4%. What is the length after shrinking?

$20 \times \frac{4}{100} = \frac{8}{10} = 0.8 \text{ m}$  /  $20 - 0.8 = 19.2 \text{ m}$

- 3 If the price of jeans is 720 L.E, if there's 35% percent off, Calculate the price of two jeans.

$10\% = 72$  .....  $35\% = 72 + 72 + 72 + 36 = 252 \text{ L.E}$  /  $\text{Jeans} = 720 - 252 = 468 \text{ L.E}$   
 $\text{Two jeans} = 468 + 468 = 936 \text{ L.E}$

- 4 If the original price of a meal is 460 LE, if there's a tax of 15%, Calculate the price of the meal after adding tax

$10\% = 46$  .....  $15\% = 46 + 23 = 69$  /  $\text{Price} = 460 + 69 = 529 \text{ L.E}$

- 5 Convert the speed of 500 cm/s to meters per second using the conversion factor?

$\frac{500 \text{ cm}}{s} \times \frac{1 \text{ m}}{100 \text{ cm}} = \frac{500}{100} = 5 \text{ m/s}$

- 6 Ahmed drove 240 km in 2 hours.

Draw a tape diagram to represent the rate.

- (a) Find the rate of speed at which Ahmed drives.

- (b) How many kilometers do Ahmed cover when he drive for 7 hours?

$120 \times 7 = 840 \text{ km}$

120	120
1	1
km	hr

- 7 Select 10% and then use it as a reference ratio to find the following percentages: 60% of 150 L.E =  $10\% = 15$

$15 \times 6 = 90 \text{ L.E}$

- 8 If the lunch bill for you and your friend is EGP 300 and the sales tax rate is 5% and a 10% service charge is added. Calculate the total amount of lunch?

$10\% = 30$  .....  $15\% = 30 + 15 = 45$  /  $\text{Price} = 300 + 45 = 345 \text{ L.E}$



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- 9 We ate 5 out of 10 bananas. What percentage of the bananas did we eat? Determine the part, whole, and percentage of this question:

Percentage =  $\frac{5}{10} \times 100 = 50\%$

Total	Part	Percentage
10	5	?

- 10 A shoe that costs EGP 1,400 has a 20% discount, calculate the value of the amount saved and the price of the shoe after the discount?

$100\% = 1400$      $20\% = 1400 \times 2 = 280$  L.E. ← saved amount  
 Price =  $1400 - 280 = 1120$

- 11 Assuming you stored 20 boxes of goods, which is 80% of the boxes, What is the total number of boxes?

total =  $20 \times \frac{100}{80} = \frac{100}{4} = 25$  boxes.

- 12 If there are 40% of math books in a school library containing 1,800 books in total, Find the number of math books in the library.



- 13 If the percentage of students who succeeded in the science exam is 87%, Find percentage of students who failed

13%

- 14 A car travels 240 kilometres using 8 litters of gasoline, determine the unit rate with which strategy you prefer?

$240 \div 8 = 30$  km/Liter

- 15 A train is traveling at 0.75 kilometers per minute. What is its speed in kilometers per hour?

$\frac{75 \text{ km}}{100 \text{ min}} \times \frac{60 \text{ min}}{1 \text{ hr}} = \frac{75 \times 60}{100} = 45 \text{ km/hr.}$



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#### 01: CHOOSE THE CORRECT ANSWER

$$\begin{array}{c|c} (-1+) & (+,+) \\ \hline (-1-) & (+,-) \end{array}$$

1 Which of the following lies in the 2<sup>nd</sup> quadrant?

- a (2, 7)      b (5, -3)      c (-5, -9)      d (-1, 5)

2 The point ..... lies on the x-axis.

- a (0, 3)      b (-1, -4)      c (-5, 0)      d (0, -5)

3 The distance between the point (0, -4) and the origin point is ..... units

- a 0      b -4      c 4      d 8

4 If the point (x, -4) lies in the 3rd quadrant, then the value of x is .....

- a 7      b -1      c 2      d 5

5 The image of the point (4, -3) by reflection on x-axis is ..... (4, 3)

- a (4, -3)      b (-4, -3)      c (4, 3)      d (-4, 3)

6 If the point (x, 6) lies in the 1<sup>st</sup> quadrant, then the value of x is .....

- a -7      b -1      c -2      d 5

7 The point (-8, 3) lies in .....

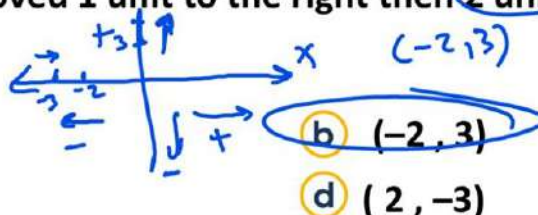
- a 1<sup>st</sup> quadrant      b 2<sup>nd</sup> quadrant      c 3<sup>rd</sup> quadrant      d 4<sup>th</sup> quadrant

8 The image of the point (0, 7) by reflection on the y-axis is .....

- a (0, -7)      b (0, 0)      c (7, 0)      d itself

9 If the point A (-3, 5) moved 1 unit to the right then 2 units downward, then A will be .....

- a (-4, 7)      b (-2, 3)      c (-2, -3)      d (2, -3)



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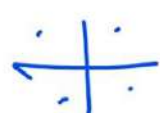
(3, 4)

- 10 If the image of a point by reflection on the y-axis is  $(-3, 4)$ , then the point is .....
- a  $(4, -3)$     b  $(3, 4)$     c  $(-3, -4)$     d  $(-4, 3)$
- 11 The distance between the points A  $(5, -5)$  and B  $(5, 4)$  is ..... units.
- a 0    b 1    c 9    d 10
- 12 The point ..... lies on the y-axis.
- a  $(0, 3)$     b  $(-1, -4)$     c  $(-5, 0)$     d  $(5, -5)$
- 13 What is the distance between the two points  $(4, -7)$  and  $(-5, -7)$ ?
- a 1 unit    b 3 units    c 7 units    d 9 units
- 14 Which point of the following can be vertex of right angled-triangle If another vertices are  $(0, 3)$  and  $(5, 0)$ ?  $(0, 0)$  &  $(5, 3)$
- a  $(0, 3)$     b  $(0, 5)$     c  $(3, 5)$     d  $(0, 0)$
- 15 The distance between  $-6$  and  $5$  on the number line is ..... units
- a 1    b  $-1$     c 11    d 5
- 16 If the x-coordinate of a point is zero, then this point lies .....
- a in 1<sup>st</sup> quadrant    b in 3<sup>rd</sup> quadrant    c on x-axis    d on y-axis
- 17 If the y-coordinate of a point is zero, then this point lies .....
- a in 1<sup>st</sup> quadrant    b in 3<sup>rd</sup> quadrant    c on x-axis    d on y-axis
- 18 The greater the value of the x-coordinate, ..... the point is to the y-axis
- a farther    b closer    c equal    d otherwise
- 19 Point C  $(-5, -3)$  lies on the ..... quadrant.
- a first    b third    c second    d fourth



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## 02: COMPLETE THE FOLLOWING

- 1 The distance between A (3, 4) and ~~x~~<sup>(0, 10)</sup>-axis is .....<sup>4</sup>..... units.
- 2 The distance between X(-4, 5) and Y(~~4~~<sup>-4</sup>, -5) is .....<sup>10</sup>..... units.
- 3 The point (-9, -2) lies on the ~~Third~~<sup>Third</sup>... quadrant. 
- 4 The coordinate plane is separated into .....<sup>4</sup>..... quadrants.
- 5 The image of point (7, ~~-2~~<sup>-2</sup>) by reflection on .....<sup>y-axis</sup> is (-7, ~~-2~~<sup>-2</sup>).
- 6 The image of the point (0, -1) by reflection on the y-axis is .....<sup>itself / (0, -1)</sup>.....
- 7 Point C (0, 3) lies on .....<sup>y</sup>.....-axis.
- 8 The image of the point (~~4~~<sup>4</sup>, 3) by reflection on .....<sup>x-axis</sup> is (~~4~~<sup>4</sup>, -3).
- 9 The x-coordinate of any point that lies on the y-axis is .....<sup>zero</sup>.....
- 10 The y-coordinate of any point that lies on the x-axis is .....<sup>zero</sup>.....
- 11 The point (4, 7) by reflection across the x-axis is the point .....<sup>(4, -7)</sup>.....
- 12 The point C (a, 5) lies on the y-axis, then a = .....<sup>0</sup>.....
- 13 The smaller the absolute value of the y-coordinate, <sup>closer</sup>..... the point is to the x-axis.





### Q3: ANSWER THE FOLLOWING

1 Determine which quadrant you can plot the ordered pair in:

- a  $(2, 5) \rightarrow$  ...1st... b  $(-1, 2) \rightarrow$  ...second... c  $(1, -5) \rightarrow$  ...4th...  
d  $(4, -3) \rightarrow$  ...4th... e  $(-7, -1) \rightarrow$  ...3rd... f  $(5, 5) \rightarrow$  ...1st...

Points D and K are images of each other by reflection across the y-axis.

Give the coordinates of point K if the coordinates of point D are the following:

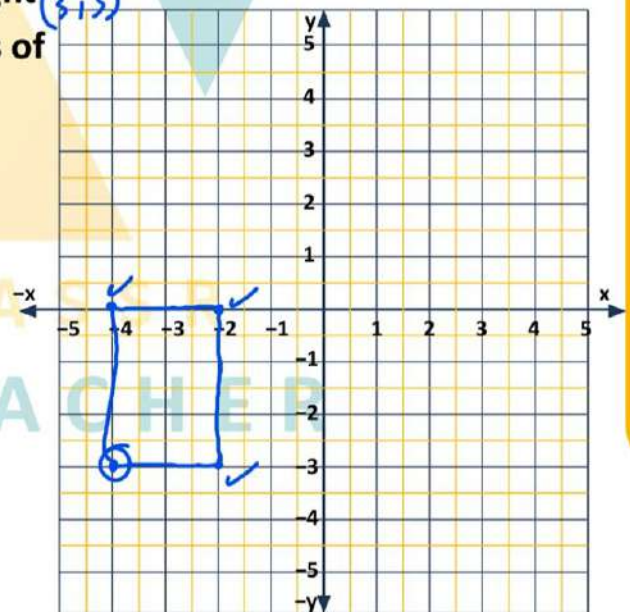
- a  $(8, 1) \rightarrow$  ...(-8, 1)... b  $(-1, 1) \rightarrow$  ...(-1, 1)... c  $(-1, -5) \rightarrow$  ...(-1, -5)...  
d  $(0, -5) \rightarrow$  ...(-5, -5)... e  $(4, -4) \rightarrow$  ...(-4, -4)... f  $(-7, 0) \rightarrow$  ...(-7, 0)...

2 By using paper graph: Plot the points  $(-3, 3)$ ,  $(3, -1)$ , and  $(-3, -1)$  and connect them. Does this figure form a right triangle? If yes, what are the coordinates of the vertex of the right angle?

Yes,  $(-3, -1)$

3 The point  $(-4, -3)$  is a vertex of a rectangle with sides 2 units wide and 3 units long. Determine another 3 points to complete the rectangles.

$(-2, -3)$ ,  $(-2, 0)$ ,  $(-4, 0)$



اللهم اجعل هذا العمل خالصا لوجهك الكريم واكتب له القبول  
والنفع يا كريم يا وهّاب.



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حمل الآن

مجاناً وحصرياً

# المراجعة رقم (5)

## اختبار شهر مارس





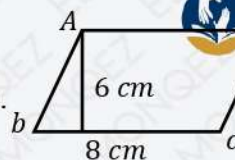
**Model (1)**
**Question 1 : Choose the correct answer :**

- ① 36 Second = ..... hour  
 (a) 10 (b) 0.01 (c) 0.1 (d) 1
- ②  $\frac{x}{5} = 20\%$  , then X = .....  
 (a) 1 (b) 100 (c) 20 (d) 25
- ③ 50 % of kilo meter = .....meter  
 (a) 1000 (b) 5000 (c) 500 (d) 50
- ④ The area of triangle = .....  
 (a)  $\frac{1}{2} \times b \times h$  (b)  $b \times h$  (c)  $W \times h$  (d)  $b \times b$
- ⑤ The points ( -3,4 ) and ( 4 , -3 ) lie in the .....  
 (a) Same quadrant (b) 2<sup>nd</sup> and 3<sup>rd</sup> quadrants , respectively  
 (c) 2<sup>nd</sup> and 4<sup>th</sup> quadrant , respectively (d) 4<sup>th</sup> and 2<sup>nd</sup> quadrant , respectively
- ⑥ 55 %  $\square \frac{2}{5}$   
 (a) < (b) > (c) = (d) ≥
- ⑦ The image of the point ( - 2,5 ) by reflection across the X-axis is .....  
 (a) (-2,5) (b) (-2, -5) (c) (2,5) (d) (2, -5)
- ⑧ 1 - 25 % = .....  
 (a) 75% (b) 24% (c) 75 (d) 24
- ⑨ The X coordinate of the point ( 3 , -2 ) is .....  
 (a) 2 (b) -3 (c) -2 (d) 3

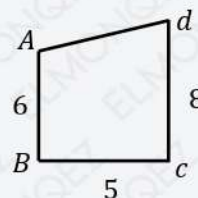
**Question 2 : Answer the following :**

- ① Which is best buy ?  
 a) 20 L.E for 4 kg  
 b) 12 L.E for 6 Kg
- ② Find the distance between two points ( 5 , -1 ) , ( 4 , -1 ) .



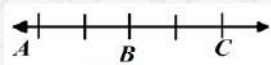


- 3 From the opposite figure , Find the area of parallelogram.
- 4 Find the area of triangle whose base length is 4 cm and its height is 3cm .
- 5 A Factory produces 4800 bottles of soda in 6 hours.What is the rate production?
- 6 Find the value of X :  $\frac{x}{9} = \frac{15}{100} = 15 \%$
- 7 Find the area of trapezium :



### Model (2)

#### Question 1 : Choose the correct answer :

- 1 1 Km is a conversion factor:
  - (a) 2 hours
  - (b) 1.000 km
  - (c) 1,000 m
  - (d) 100 cm
- 2  $13.31 \div 1.1 = \dots \div 11$ 
  - (a) 133.1
  - (b) 13.31
  - (c) 1.331
  - (d) 1.331
- 3 From the opposite figure the ratio AB: CB = .....
 
  - (a) 2: 5
  - (b)  $\frac{2}{4}$
  - (c) 2: 3
  - (d) 3: 4
- 4  $45\% + 0.55 = \dots$ 
  - (a) 0.1
  - (b) 100
  - (c) 1%
  - (d) 100%
- 5 If  $\frac{x-5}{5} = \frac{20}{25}$ , then the value of x is.....
  - (a) 4
  - (b) 3
  - (c) 9
  - (d) 20
- 6  $6.3 \times 0.05 = \dots$ 
  - (a) 315
  - (b) 3.15
  - (c) 0.315
  - (d) 31.5
- 7 The simplest form of 24: 48 is.....
  - (a) 1: 3
  - (b) 1: 2
  - (c) 6: 12
  - (d) 7: 12
- 8  $1\frac{1}{3}$  hours = .....minutes
  - (a) 120
  - (b) 60
  - (c) 80
  - (d) 180



- 9 Fourth of 12 ..... 0.25
- (a) < (b) = (c) > (d) otherwise

### Question 2 : Answer the following :

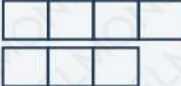
- 1 Find the value of m if  $\frac{3}{4} \times m = \frac{3}{8}$
- 2 Each stone block in the Great Pyramid has a mass of about 2,300 kilograms. How much is the mass of one block in grams?
- 3 The ratio between the number of Cats and the number of dogs is 2:5 and their Sum is 63. Find the number of each by using the tape diagram.
- 4 Find the value of the unknown number :
- a) 25% of 260 = x
- b)  $\frac{10}{100}$  of X = 120
- 5 If  $\frac{1}{x-1} = 20\%$  , then find the value of X.
- 6 If the ratio between two numbers is 3:5 and the smaller one is 15, then what is the value of the greater number?
- 7 Is (Kilometer: 100 meters) a conversion factor or not?

Model (3)

### Question 1 : Choose the correct answer :

- 1 which of the following mathematical expressions can be used to verify the division problem ?  $\frac{1}{4} \div 2 = \frac{1}{8}$
- (a)  $\frac{1}{4} \div \frac{1}{8}$  (b)  $\frac{1}{4} \times \frac{1}{8}$  (c)  $2 \times \frac{1}{8}$  (d)  $2 \times \frac{1}{4}$
- 2  $\frac{1}{3}$  of  $\frac{2}{3} =$  .....
- (a)  $\frac{2}{9}$  (b)  $\frac{1}{2}$  (c)  $\frac{1}{3}$  (d)  $\frac{2}{3}$



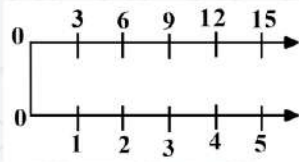
- 3 Half of 22.....  
 (a) 22 (b) 11 (c) 2 (d)  $\frac{1}{10}$
- 4  $18 : 48 = \dots\dots\dots$  ( Simplest form )  
 (a) 3 : 2 (b) 3 : 8 (c) 2 : 8 (d) 1 : 3
- 5 If the ratio 5 : 3 is the same ratio 15 : X then X = .....  
 (a) 3 (b) 5 (c) 9 (d) 15
- 6 The opposite tape diagram represents the ratio .....  
  
 (a) 3 : 4 (b) 4 : 3 (c) 1 : 3 (d) 3 : 5
- 7  $\frac{x}{18} = \frac{2}{3}$  then x = .....  
 (a) 3 (b) 12 (c) 54 (d) 27
- 8  $\frac{3}{0.5} = \frac{x}{2}$  .....  
 (a) 4 (b) 1 (c) 12 (d) 6
- 9  $\frac{x}{3^2} = \frac{3}{1}$  then x + 4 = .....  
 (a) 27 (b)  $3^2$  (c) 31 (d) 13

## Question 2 : Answer the following :

- 1 Ahmed bought a fridge; its original Price is 21,000 L.E.The Sales tax on the fridge is 14% . What is the price of the fridge adding after tax?
- 2 Sandy ate 6 oranges from 20 oranges on a plate. What is the percent of the orange Sandy ate?
- 3 Convert each of the following fractions into a Percentage.  
 a)  $\frac{2}{5}$  b)  $\frac{3}{8}$
- 4  $\frac{35 \text{ m}}{1 \text{ min}} \times \frac{\dots\dots\dots}{\dots\dots\dots} \times \frac{\dots\dots\dots}{\dots\dots\dots} = \frac{\dots\dots \text{ Km}}{1 \text{ hr}}$



- 5 If 6 cups of flour are needed to make 2 cakes, then how many cups of flours are needed to make 5 Cakes? (Using double number line)



- 6 Show which of the following ratios are equivalent and which not equivalents :
- a)  $\frac{2}{3}, \frac{6}{12}$       b)  $\frac{9}{18}, \frac{1}{2}, \frac{8}{16}$

- 7 If the ratio between Cats and dogs in a Street is 3:7 and you know that the number of dogs is 21. How many Cats are there?

Model (4)

**Question 1 : Choose the correct answer :**

- 1 Gamal studies 48 hours in 10 days, then he studies.....hour in a day
- (a) 4.4      (b) 5.4      (c) 4.8      (d) 5
- 2 A cyclist runs at aspeed of 48 km/hr,then his speed in meters per minute is ...
- (a) 7      (b) 80      (c) 800      (d) 42000
- 3 360.5 minutes ..... 6 hours
- (a) <      (b) >      (c) =      (d) ≥
- 4 The point (-3,7) is located in the..... quadrant
- (a) 1 st      (b) 2 nd      (c) 3 rd      (d) 4 th
- 5 The ordered pair representing the origin is .....
- (a) (0,0)      (b) (1,1)      (c) (1,0)      (d) (0,1)
- 6 The point (5,0) is located on the ..... Axis
- (a) x      (b) y      (c) w      (d) z
- 7 The image of point (-6,6) reflected on y-axis is .....
- (a) (6,6)      (b) (6,-6)      (c) (-6,-6)      (d) (-6,6)



- 8 The two points  $(5,x)$  and  $(-2,6)$  lie on the same line, then  $x = \dots$
- (a) 5                      (b) 2                      (c) -2                      (d) 6
- 9 The distance between  $(2,9)$  and  $(2, \dots)$  is 5 units.
- (a) 4                      (b) 2                      (c) 9                      (d) 0

### Question 2 : Answer the following :

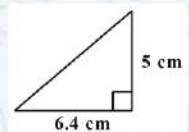
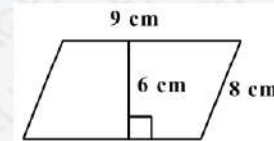
- 1 If  $A(3,5)$  ,  $B(0,5)$  ,  $C(3,6)$  ,  $D(0,-5)$  find the distance between :
- a) A and B = .....
- b) A and C = .....
- c) B and D = .....
- 2 If  $A(-1,1)$  B  $(1,3)$  C  $(2,-3)$  then:
- a) The image of point A by reflection on y-axis is .....
- b) The image of point B by reflection on x-axis is .....
- c) The image of point C by reflection on y-axis is .....
- 3 Fayrouz had 200 marbles. She gave 40 to Omar. Find the percentage of marbles left with Fayrouz now.
- 4 If there are 20 girls in a class with a percentage 40%, find out the number of students in the class.
- 5 There is a dog running at a constant speed of 48 km/hr. Convert its speed into meters /min.
- 6 Nour is making loaves of banana bread, she makes 2 loaves of banana bread, and she uses 5 cups of flour in all. How much flour does she use per loaf?
- 7 A factory (A) produces 600 lamps in 40 hours, and another factory (B) produces 700 lamps of the same kind in 50 hours. Which factory has a better rate of production?



Model (5)

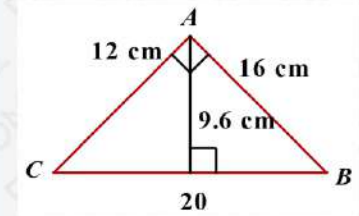
**Question 1 : Choose the correct answer :**

- ① The point (m) is located 3 units to the right and 5 units up from the origin . then the ordered pair that represent point (m) is .....  
 (a) (8,0)      (b) (3,5)      (c) (5,3)      (d) (0,8)
- ② The area of the opposite parallelogram = ..... m<sup>2</sup>  
 (a) 54      (b) 48      (c) 72      (d) 34
- ③ The area of triangle = .....  
 (a)  $\frac{1}{2} bb$       (b)  $\frac{1}{2} bh$       (c)  $\frac{1}{2} hh$       (d)  $bh$
- ④ The point which is plotted on y – axis is .....  
 (a) (5,0)      (b) (-5,0)      (c) (0,-2)      (d) (-2,-2)
- ⑤ ABCD is a parallelogram of area 200 cm<sup>2</sup> and AB = 20 cm , Bc = 40 cm then the smaller height is .....  
 (a) 10      (b) 5      (c) 160      (d) 180
- ⑥ The point (-2, -3) lies in the ..... Quadrant.  
 (a) first      (b) second      (c) third      (d) fourth
- ⑦ If the x-coordinte of a point is zero then the point lies .....  
 (a) in 1<sup>st</sup> quadrant      (b) in 2<sup>nd</sup> quadrant      (c) on x-axis      (d) in y axis
- ⑧ The area of the opposite triangle = ..... cm<sup>2</sup>  
 (a) 16      (b) 32      (c) 30      (d) 20
- ⑨ Which point is the closest to the x-axis ?  
 (a) (2,5)      (b) (7,6)      (c) (1,4)      (d) (0,2)



## Question 2 : Answer the following :

- ① Plot the points  $A(1,-1)$  ,  $B(1,3)$  ,  $C(-3,3)$  ,  $D(-3,-1)$ . What is the name of the figure ABCD?
- ② The two base lengths of parallelogram are 8 cm , 6 cm and the smaller height is 3 cm calculate the greater height of parallelogram ?
- ③ ABC is a right angled triangle at A ,  $AD \perp BC$  if  $AC = 12$  cm ,  $AB = 16$  cm ,  $BC = 20$  cm and  $AD = 9.6$  cm. Find the area of  $\triangle ABC$  in two way ?



- ④ Find the cross ponding height of the parallelogram with area  $28 \text{ cm}^2$  and base length 4 cm.
- ⑤ Find the distance between  $(-2,5)$  and  $(-2,-5)$ .
- ⑥ Find the area of the triangle whose base length is 4.8 cm and its corresponding height is 1.5 cm.
- ⑦ If  $\frac{8}{x}$  is equivelemt to  $\frac{1}{2}$  then  $x = \dots$



## Model (1)

**Question 1 : Choose the correct answer :**

- 1 36 Second = ..... hour  
 (a) 10 (b) **0.01** (c) 0.1 (d) 1
- 2  $\frac{x}{5} = 20\%$  , then X = .....  
 (a) **1** (b) 100 (c) 20 (d) 25
- 3 50 % of kilo meter = .....meter  
 (a) 1000 (b) 5000 (c) **500** (d) 50
- 4 The area of triangle = .....  
 (a)  **$\frac{1}{2} \times b \times h$**  (b)  $b \times h$  (c)  $W \times h$  (d)  $b \times b$
- 5 The points ( -3,4 ) and ( 4, -3 ) lie in the .....  
 (a) Same quadrant (b) 2<sup>nd</sup> and 3<sup>rd</sup> quadrants, respectively  
 (c) **2<sup>nd</sup> and 4<sup>th</sup> quadrant , respectively** (d) 4<sup>th</sup> and 2<sup>nd</sup> quadrant , respectively
- 6 55 %   $\frac{2}{5}$   
 (a) < (b) **>** (c) = (d) ≥
- 7 The image of the point ( - 2,5 ) by reflection across the X-axis is .....  
 (a) (-2,5) (b) **(-2, -5)** (c) (2,5) (d) (2, -5)
- 8 1 - 25 % = .....  
 (a) **75%** (b) 24% (c) 75 (d) 24
- 9 The X coordinate of the point ( 3 , -2 ) is .....  
 (a) 2 (b) -3 (c) -2 (d) **3**

**Question 2 : Answer the following :**

- 1 Which is best buy ?  
 a) 20 L.E for 4 kg  
 b) 12 L.E for 6 Kg  
**b) 12 for 5 Kg**

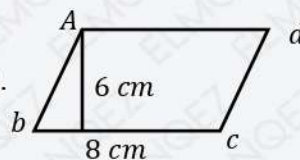


- 2 Find the distance between two points ( 5 , -1 ) , ( 4 , -1 ) .

$$=1$$

- 3 From the opposite figure , Find the area of parallelogram.

$$\text{Area} = 8 \times 6 = 48 \text{ cm}^2$$



- 4 Find the area of triangle whose base length is 4 cm and its height is 3cm .

$$\text{Area: } \frac{1}{2} \times b \times h.$$

$$\frac{1}{2} \times 4 \times 3 = 6 \text{ cm}^2$$

- 5 A Factory produces 4800 bottles of soda in 6 hours. What is the rate production?

$$\frac{4800 \text{ bottles}}{6 \text{ hour}} = 800 \text{ bottles in hour}$$

- 6 Find the value of X :  $\frac{x}{9} = \frac{15}{100} = 15\%$

$$\frac{x}{9} = \frac{15}{100} = X = 1.35$$

- 7 Find the area of trapezium :

Area of figure 1

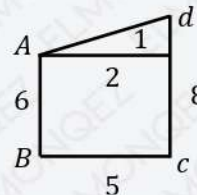
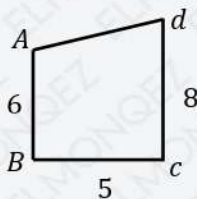
$$= \frac{1}{2} \times 5 \times 2 = 5 \text{ Cm}^2$$

Area of figure 2

$$5 \times 6 = 30 \text{ cm}^2$$

Area of trapzium:

$$30 + 5 = 35 \text{ Cm}^2$$



Model (2)

### Question 1 : Choose the correct answer :

- 1 1 Km is a conversion factor:

(a) 2 hours

(b) 1.000 km

(c) **1,000 m**

(d) 100 cm

- 2  $13.31 \div 1.1 = \dots \div 11$

(a) **133.1**

(b) 13.31

(c) 1.331

(d) 1.331

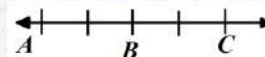
- 3 From the opposite figure the ratio AB: CB = .....

(a) 2:5

(b)  $\frac{2}{4}$

(c) **2:3**

(d) 3:4



- 4  $45\% + 0.55 = \dots$

(a) 0.1

(b) 100

(c) 1%

(d) **100%**



- 5 If  $\frac{x-5}{5} = \frac{20}{25}$ , then the value of x is.....
- (a) 4 (b) 3 (c) 9 (d) 20
- 6  $6.3 \times 0.05 = \dots\dots\dots$
- (a) 315 (b) 3.15 (c) 0.315 (d) 31.5
- 7 The simplest form of 24: 48 is.....
- (a) 1: 3 (b) 1: 2 (c) 6: 12 (d) 7: 12
- 8  $1\frac{1}{3}$  hours = .....minutes
- (a) 120 (b) 60 (c) 80 (d) 180
- 9 Fourth of 12 ..... 0.25
- (a) < (b) = (c) > (d) otherwise

## Question 2 : Answer the following :

- 1 Find the value of m if  $\frac{3}{4} \times m = \frac{3}{8}$
- $m = \frac{3}{8} \div \frac{3}{4}$
- $m = \frac{3}{8} \times \frac{4}{3} = \frac{4}{8} = \frac{1}{2}$
- 2 Each stone block in the Great Pyramid has a mass of about 2,300 kilograms. How much is the mass of one block in grams?
- $2300 \text{ Kg} \times \frac{1000\text{gm}}{1\text{Kg}} = 2.300.000\text{gm}$
- 3 The ratio between the number of Cats and the number of dogs is 2:5 and their Sum is 63. Find the number of each by using the tape diagram.

Cats : Dog : Sum

2 : 5 : 7  
... : ... : 63

Number of Cats =  $\frac{2 \times 63}{7} = 18$  cats.

Number of dogs =  $\frac{5 \times 63}{7} = 45$  dogs.

Solve by using tape diagram

C 

9	9
---	---

 18 Cats

D 

9	9	9	9	9
---	---	---	---	---

 45 Dogs

$63 \div 7 = 9$



4 Find the value of the unknown number :

a) 25% of 260 = x

b)  $\frac{10}{100}$  of X = 120

a)  $\frac{25}{100} \times 260 = X$   $X = 65$

b)  $\frac{100}{10} \times 120 = X$   $X = 1200$

5 If  $\frac{1}{x-1} = 20\%$  , then find the value of X.

$$\frac{1}{x-1} = \frac{20}{100}$$

$$1 \times 100 = 20 (X-1)$$

$$100 = 20X - 20$$

$$100 + 20 = 20X$$

$$120 = 20X (\div 20)$$

$$X=6$$

6 If the ratio between two numbers is 3:5 and the smaller one is 15, then what is the value of the greater number?

Smaller : Greater

$$3 : 5$$

$$15 : \dots\dots$$

$$\text{The Greater number} = \frac{15 \times 5}{3} = 25$$

7 Is (Kilometer: 100 meters) a conversion factor or not?

Not a conversion factor

Because  $1Km \neq 100m$

$$1Km = 1000m$$

Model (3)

Question 1 : Choose the correct answer :

1 which of the following mathematical expressions can be used to verify the division problem ?  $\frac{1}{4} \div 2 = \frac{1}{8}$

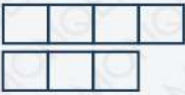
a)  $\frac{1}{4} \div \frac{1}{8}$

b)  $\frac{1}{4} \times \frac{1}{8}$

c)  $2 \times \frac{1}{8}$

d)  $2 \times \frac{1}{4}$



- 2  $\frac{1}{3}$  of  $\frac{2}{3} = \dots\dots\dots$   
 (a)  $\frac{2}{9}$  (b)  $\frac{1}{2}$  (c)  $\frac{1}{3}$  (d)  $\frac{2}{3}$
- 3 Half of 22.....  
 (a) 22 (b) 11 (c) 2 (d)  $\frac{1}{10}$
- 4  $18 : 48 = \dots\dots\dots$  (Simplest form)  
 (a) 3 : 2 (b) 3 : 8 (c) 2 : 8 (d) 1 : 3
- 5 If the ratio 5 : 3 is the same ratio 15 : X then X = .....  
 (a) 3 (b) 5 (c) 9 (d) 15
- 6 The opposite tape diagram represents the ratio .....  
  
 (a) 3 : 4 (b) 4 : 3 (c) 1 : 3 (d) 3 : 5
- 7  $\frac{x}{18} = \frac{2}{3}$  then x = .....  
 (a) 3 (b) 12 (c) 54 (d) 27
- 8  $\frac{3}{0.5} = \frac{x}{2}$  .....  
 (a) 4 (b) 1 (c) 12 (d) 6
- 9  $\frac{x}{3^2} = \frac{3}{1}$  then x + 4 = .....  
 (a) 27 (b) 3<sup>2</sup> (c) 31 (d) 13

## Question 2 : Answer the following :

- 1 Ahmed bought a fridge; its original Price is 21,000 L.E. The Sales tax on the fridge is 14% . What is the price of the fridge adding after tax?

tax rate (14% = 0.14):  $21,000 \text{ LE} \times 0.14 = 2,940 \text{ LE}$

The total price after tax =  $21,000 \text{ LE} + 2,940 \text{ LE} = 23,940 \text{ LE}$

So, the fridge costs 23,940 LE after tax

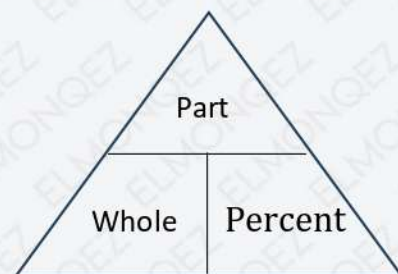
- 2 Sandy ate 6 oranges from 20 oranges on a plate. What is the percent of the orange Sandy ate?

The percent = Part  $\div$  Whole

$$= 6 \div 20$$

$$= 0.3 = 30\%$$

So, the percent of the oranges that Sandy ate = 30%





- 3 Convert each of the following fractions into a Percentage.

a)  $\frac{2}{5}$

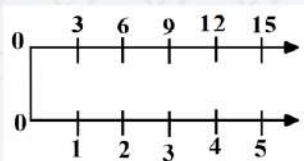
b)  $\frac{3}{8}$

a)  $\frac{2 \times 20}{5 \times 20} = \frac{40}{100} = 40\%$

b)  $\frac{3 \times 125}{8 \times 125} = \frac{375}{1000} = 0.375 = 37.5\%$

4  $\frac{35 \text{ m}}{1 \text{ min}} \times \frac{\dots\dots\dots}{\dots\dots\dots} \times \frac{\dots\dots\dots}{\dots\dots\dots} = \frac{\dots\dots\dots \text{ Km}}{1 \text{ hr}}$   
 $\frac{35 \text{ m}}{1 \text{ min}} \times \frac{1 \text{ Km}}{1000 \text{ m}} \times \frac{60 \text{ min}}{1 \text{ hr}} = \frac{35 \times 60 \text{ Km}}{1000 \text{ hr}} = \frac{2.1 \text{ Km}}{1 \text{ hr}}$

- 5 If 6 cups of flour are needed to make 2 cakes, then how many cups of flours are needed to make 5 Cakes? (Using double number line)



So the number of needed cups = 15 cups

- 6 Show which of the following ratios are equivalent and which not equivalents :

a)  $\frac{2}{3}, \frac{6}{12}$

b)  $\frac{9}{18}, \frac{1}{2}, \frac{8}{16}$

a) Not equivalent

b) equivalent

- 7 If the ratio between Cats and dogs in a Street is 3:7 and you know that the number of dogs is 21. How many Cats are there?

The number of cats =  $3 \times 21 \div 7 = 9 \text{ cats}$

Model (4)

### Question 1 : Choose the correct answer :

- 1 Gamal studies 48 hours in 10 days, then he studies.....hour in a day  
 (a) 4.4 (b) 5.4 (c) **4.8** (d) 5
- 2 A cyclist runs at aspeed of 48 km/hr,then his speed in meters per minute is ...  
 (a) 7 (b) 80 (c) **800** (d) 42000
- 3 360.5 minutes ..... 6 hours  
 (a) < (b) > (c) = (d) ≥
- 4 The point (-3,7) is located in the..... quadrant  
 (a) 1 st (b) **2 nd** (c) 3 rd (d) 4 th



- 5 The ordered pair representing the origin is .....  
 (a)  $(0,0)$  (b)  $(1,1)$  (c)  $(1,0)$  (d)  $(0,1)$
- 6 The point  $(5,0)$  is located on the ..... Axis  
 (a)  $x$  (b)  $y$  (c)  $w$  (d)  $z$
- 7 The image of point  $(-6,6)$  reflected on  $y$ -axis is .....  
 (a)  $(6,6)$  (b)  $(6,-6)$  (c)  $(-6,-6)$  (d)  $(-6,6)$
- 8 The two points  $(5,x)$  and  $(-2,6)$  lie on the same line, then  $x =$  .....  
 (a) 5 (b) 2 (c)  $-2$  (d)  $6$
- 9 The distance between  $(2,9)$  and  $(2, \dots)$  is 5 units.  
 (a)  $4$  (b) 2 (c) 9 (d) 0

## Question 2 : Answer the following :

- 1 If  $A(3,5)$ ,  $B(0,5)$ ,  $C(3,6)$ ,  $D(0,-5)$  find the distance between :  
 a) A and B = .....  
 b) A and C = .....  
 c) B and D = .....  
 a) A and B = 3 units  
 b) A and C = 1 units  
 c) B and D = 10 units
- 2 If  $A(-1,1)$ ,  $B(1,3)$ ,  $C(2,-3)$  then:  
 a) The image of point A by reflection on  $y$ -axis is .....  
 b) The image of point B by reflection on  $x$ -axis is .....  
 c) The image of point C by reflection on  $y$ -axis is .....  
 a)  $(1,1)$   
 b)  $(1,-3)$   
 c)  $(-2,-3)$
- 3 Fayrouz had 200 marbles. She gave 40 to Omar. Find the percentage of marbles left with Fayrouz now.  
 The percentage of marbles  $= \frac{40}{200} \times 100 = 20\%$
- 4 If there are 20 girls in a class with a percentage 40%, find out the number of students in the class.  
 $20 \div \frac{40}{100} = 50$  student



- 5 There is a dog running at a constant speed of 48 km/hr. Convert its speed into meters /min.

$$48 \times \frac{1000m}{1km} \times \frac{1hr}{60min} = 800 m/min$$

- 6 Nour is making loaves of banana bread, she makes 2 loaves of banana bread, and she uses 5 cups of flour in all. How much flour does she use per loaf?

$$5 \div 2 = 2.5 \text{ cups per loaf}$$

- 7 A factory (A) produces 600 lamps in 40 hours, and another factory (B) produces 700 lamps of the same kind in 50 hours. Which factory has a better rate of production?

$$\text{Factory(A)rate} = 600 \div 40 = 15$$

$$\text{Factory(B)rate} = 700 \div 50 = 14$$

Factory(A) is better rate of production

Model (5)

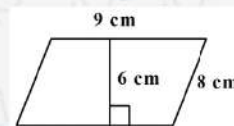
### Question 1 : Choose the correct answer :

- 1 The point (m) is located 3 units to the right and 5 units up from the origin . then the ordered pair that represent point (m) is .....

(a) (8,0) (b) (3,5) (c) (5,3) (d) (0,8)

- 2 The area of the opposite parallelogram = ..... m<sup>2</sup>

(a) 54 (b) 48 (c) 72 (d) 34



- 3 The area of triangle = .....

(a)  $\frac{1}{2} bb$  (b)  $\frac{1}{2} bh$  (c)  $\frac{1}{2} hh$  (d)  $bh$

- 4 The point which is plotted on y – axis is .....

(a) (5,0) (b) (-5,0) (c) (0,-2) (d) (-2,-2)

- 5 ABCD is a parallelogram of area 200 cm<sup>2</sup> and AB = 20 cm , Bc = 40 cm then the smaller height is .....

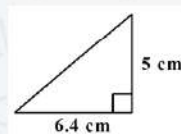
(a) 10 (b) 5 (c) 160 (d) 180

- 6 The point (-2, -3) lies in the ..... Quadrant.

(a) first (b) second (c) third (d) fourth



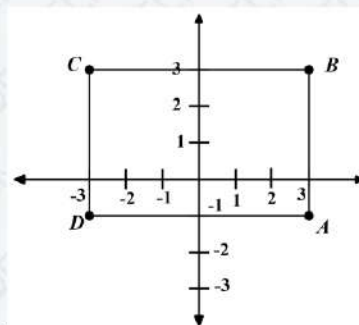
- 7 If the x-coordinte of a point is zero then the point lies .....  
 (a) in 1<sup>st</sup> quadrant (b) in 2<sup>nd</sup> quadrant (c) on x-axis (d) **in y axis**
- 8 The area of the opposite triangle = ..... cm<sup>2</sup>  
 (a) **16** (b) 32 (c) 30 (d) 20
- 9 Which point is the closest to the x-axis ?  
 (a) (2,5) (b) (7,6) (c) **(1,4)** (d) (0,2)



## Question 2 : Answer the following :

- 1 Plot the points A(1,-1) , B (1,3) , C (-3,3) , D (-3,-1). What is the name of the figure ABCD?

The name of the figure ABCD is square



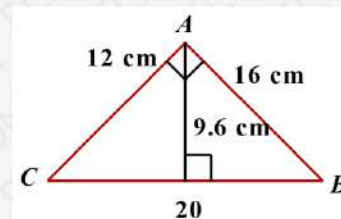
- 2 The two base lengths of parallelogram are 8 cm , 6 cm and the smaller height is 3 cm calculate the greater height of parallelogram ?

$$H = \frac{\text{Area}}{B} = \frac{8 \times 3}{6} = 4 \text{ cm}$$

- 3 ABC is a right angled triangle at A , AD ⊥ BC if AC = 12 cm , AB = 16 cm , BC = 20 cm and AD = 9.6 cm. Find the area of ΔABC in two way ?

$$1\text{st way} = A = \frac{1}{2} \times 16 \times 12 = 96 \text{ cm}^2$$

$$2\text{nd way} = A = \frac{1}{2} \times 20 \times 9.6 = 96 \text{ cm}^2$$



- 4 Find the cross ponding height of the parallelogram with area 28 cm<sup>2</sup> and base length 4 cm.

$$\text{height} = A \div \text{Base}$$

$$h = 28 \div 4 = 7 \text{ cm}$$

- 5 Find the distance between (-2,5) and (-2,-5).

$$5 + 5 = 10 \text{ units}$$

6

Find the area of the triangle whose base length is 4.8 cm and its corresponding height is 1.5 cm.

$$B = 4.8 \text{ cm}, h = 1.5$$

$$A = \frac{1}{2} \times h = \frac{1}{2} \times 4.8 \times 1.5 = 3.6 \text{ cm}^2$$

7

If  $\frac{8}{x}$  is equivalent to  $\frac{1}{2}$  then  $x = \dots$

16



# كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9

